COUNTY OF LOS ANGELES



Robert G. Atkins Interim Agricultural Commissioner/ Director of Weights and Measures

Department of Agricultural Commissioner/ Weights and Measures

Pest Exclusion and Produce Quality 11012 Garfield Avenue South Gate, California 90280 http://acwm.co.la.ca.us

December 7, 2004

The Honorable Board of Supervisors County of Los Angeles 383 Hall of Administration 500 West Temple Street Los Angeles, CA 90012

Dear Supervisors:

APPROVAL OF AGREEMENT #03-0777 WITH THE CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE FOR THE SUPPORT OF THE SUDDEN OAK DEATH STATEWIDE EMERGENCY RESPONSE (ALL DISTRICTS)(3-VOTES)

IT IS RECOMMENDED THAT YOUR BOARD:

- Appoint the Agricultural Commissioner/Director of Weights and Measures
 (ACWM) as the lead agent for the County of Los Angeles in the detection,
 eradication, trace forward/trace back investigation, quarantine enforcement,
 administrative support, and training for the identification of Phytophthora
 ramorum, the fungus that causes Sudden Oak Death (SOD). This appointment
 will be presented to the Secretary of the California Department of Food and
 Agriculture (CDFA).
- 2. Approve and instruct the Chairman to sign the attached agreement #03-0777 with CDFA to continue the SOD Control Program effective March 1, 2004 through February 28, 2005.
- 3. Authorize the ACWM to amend the contract agreement in an amount not to exceed 15% of the original contract.

PURPOSE/JUSTIFICATION OF RECOMMENDED ACTION:

Approval of the recommended actions will enable ACWM to prevent the spread of SOD within Los Angeles County.

The SOD Control Program will significantly affect plant growing nurseries, Los Angeles County's number one agricultural industry. The program calls for the inspection of all nursery stock destined for interstate shipment.

The Honorable Board of Supervisors December 7, 2004 Page 2

ACWM has consulted and worked collaboratively with all the shipping nurseries to assist in controlling the spread of this disease.

Implementation of Strategic Plan Goals

Awarding this contract meets Los Angeles County's Strategic Plan Goal of Service Excellence. The SOD Control Program significantly enhances the ACWM's ability to certify nursery plants shipped from Los Angeles County. The United States Department of Agriculture requires inspection of commercial nurseries moving plants interstate from California. Our timely response to shipping requests benefit the County's agricultural industry.

FISCAL IMPACT/FINANCING:

Under this agreement, CDFA will provide funding in the amount of \$357,311.38 for work performed by ACWM from March 1, 2004 through February 28, 2005. Therefore, the program will allow for full cost recovery and has no effect on net County cost.

FACTS AND PROVISIONS/LEGAL REQUIREMENTS:

Pursuant to the Plant Protection Act, the United States Department of Agriculture issued a quarantine on April 9, 2004 to prevent the spread of SOD to non-infested areas of the United States. Nurseries may not ship regulated host plants interstate to uninfested areas until they have been inspected and it is determined there is no evidence of SOD infestation.

County Counsel has approved the contract as to form.

IMPACT OF CURRENT SERVICES (OR PROJECTS):

As the lead agency, ACWM will conduct a public information program to alert nurseries and the public about SOD symptoms and avoidance, as well as perform inspections of wholesale nurseries. Without inspection, nursery growers would be prohibited from shipping SOD host material interstate from California, resulting in a substantial financial loss to the County's plant producing nurseries.

The Honorable Board of Supervisors December 7, 2004 Page 3

CONCLUSION:

When approved, please return to this Department the five (5) signed copies along with the minute order authorizing the Chairman to sign. The Department will forward to the CDFA Contracts Office.

Respectfully submitted,

Robert G. Atkins Interim Agricultural Commissioner/ Director of Weights and Measures

Attachments RGA:PJD:pd

c: Chief Administrative Officer Executive Officer County Counsel STATE OF CALIFORNIA STANDARD AGREEMENT STD 2/3 (Rev 06/03)

AGREEMENT NUMBER
03-0777

		REGISTRATION NUMBER
This Agreement is entered into between the STATE AGENCY'S NAME DEPARTMENT OF FOOD AND AGRICUTOR'S NAME		ractor named below:
2. The term of this Agreement is: March 1, 2004	Through February 28, 200	5
3. The maximum amount ★ \$357,311.38		The number of the second state of the second state of the second
of this Agreement is: Three Hundred Fit	fty-Seven Thousand Three Hundre	ed Eleven Dollars and Thirty-Eight Cents
 The parties agree to comply with the terms a reference made a part of the Agreement: 	and conditions of the following	ng exhibits which are by this
Index - including the following altachments Sudden Oak Death County Work Plan Form Appendix A,— National Survey Protocol Appendix B Confirmed Nursery Protocol Appendix C - Pest Exclusion Advisory 19-2004 Appendix D 1.) Pest Exclusion Advisory 12-2004 2.) Pest Exclusion Advisory 15-2004 3.) Pest Exclusion Advisory 18-2004 Appendix E 1.) Amended Federal Order Restricting Moof Nursery Stock from CA nurseries Appendix F - Pest Exclusion Advisory 13-2004 Appendix F - Pest Exclusion Advisory 13-2004 Appendix G Monthly Work Report Appendix B Budget Detail and Payment Provision Attachment 1 2 Pages Exhibit C General Terms and Conditions Check mark one Item below as Exhibit D: Exhibit D-Special Terms and Conditions (Attached hereto as part of this Agreement) Exhibit D-Special Terms and Conditions	Pages:E-8 to E-17 Pages:E-18 to E-23 Pages: F-1 to F-5 Pages: G-1 to G-2 Pages: H-1 to H-2 APPROVED	1 Page AS TO FORM es County Counsel 1 Page Deputy
N WITNESS WHEREOF, this Agreement has been execu	ited by the parties hereto.	California Department of General
CONTRACTOR		Services Use Only
CONTRACTOR'S NAME (If other than an individual, state whether a	o corporation, pannersnip, etc.)	
COUNTY OF LOS ANGELES BY (Authorized Signature)	DATE SIGNED)	
Zu		
PRINTED NAME AND TITLE OF PERSON SIGNING		
ADDRESS 12300 Lower Azusa Road, Arcadia, CA 91005		
STATE OF CALIFORNIA	4	
AGENCY NAME DEPARTMENT OF FOOD AND AGRICULTURE BY (Authorized Signature) Z	DATE SIGNED	
PRINTED NAME AND TITLE OF PERSON SIGNING		
PAULA LEWIS, ACQUISITIONS MANAGER ADDRESS		
1220 N STREET, ROOM 100, SACRAMENTO, CA 95814		☐ Exempt per

Agreement No. <u>03-0</u>
Page 1 of

EXHIBIT A

SCOPE OF WORK

Contractor agrees to provide the services described herein:

The County of Los Angeles agrees to perform the listed activities in support of the Sudden Oak Death (SOD) Statewide Emergency Response. For each county, the scope of work will include, as appropriate, the activities described below:

Detection
Eradication
Trace-Forward/Trace-Back Investigation
Quarantine Enforcement

Other (communication, training, and administrative support, vehicle usage, and supplies)

1) Detection

The California Department of Food and Agriculture (CDFA) conducted a statewide Detection Survey from February through April 2004 to determine if *P. ramorum* exists in nurseries outside of the 13 counties (then 12 counties) infested with SOD. The survey was conducted in cooperation with the United States Department of Agriculture (USDA) and county agricultural commissioners, and followed the **National Survey Protocol** (**Appendix A**). A total of 88 nurseries in the non-infested counties were surveyed.

County Agricultural Commissioners assisted in the performance of the Statewide Detection Survey by contacting nurseries, scheduling inspections, and inspecting and sampling plant material.

2) Eradication

All infestations of *P. ramorum* in nurseries in non-infested counties must be eradicated in order for the county to continue to be considered non-infested. Eradication activities include destruction, delimitation, and sanitation procedures outlined in the Confirmed Nursery Protocol for wholesale/production nurseries (**Appendix B**), and in Pest Exclusion Advisory 19-2004 for retail nurseries (**Appendix C**).

3) Trace-Forward/Trace Back Investigation

For all nursery detections of *P. ramorum*, County Agricultural Commissioners conduct Trace-Forward and Trace-Back activities to locate and sample potentially infected host and associated host nursery stock shipped by or to an infected nursery. Trace-forward instructions are contained in Pest Exclusion Advisories 12-2004, 15-2004, and 18-2004 (**Appendix D1-D3**).

4) Quarantine Enforcement

In response to the detection of *P. ramorum* in nurseries outside of the 13 infested counties, the USDA, Animal and Plant Health Inspection Services issued an Emergency Order restricting the interstate movement of SOD host and associated host nursery stock from the 45 non-infested counties in California. County Agricultural Commissioners must perform the regulatory enforcement activities outlined in Emergency Order Restricting Movement of Nursery Stock after April 22, 2004 and Emergency Order Restricting Movement of Nursery Stock before April 22, 2004 (Appendix E1-E2a-b) for all nurseries intending to move host and associated host material interstate.

County Agricultural Commissioners must also follow data entry instructions in Pest Exclusion Advisory 13-2004 (**Appendix F**).

Agreement No. <u>03-07-17</u> Page 2 of <u>2</u>.

5) Other (communication, training, and administrative support, vehicle usage, and supplies) County Agricultural Commissioners are responsible for providing training for their staff for all activities associated with the detection and eradication of *P. ramorum* and the enforcement of *P. ramorum* quarantine restrictions.

County Agricultural Commissioners are responsible for public outreach at the local level, and must attend conference calls with CDFA Pest Exclusion staff to learn of policy decisions and changes

County Agricultural Commissioners must provide the following three items on a monthly basis to CDFA:

a.) Monthly Work Report (Appendix G)

b.) Itemized invoice on county letterhead (including hourly rates, supplies, and vehicle usage costs)

c.) USDA/APHIS PPQ Tracking Log (Appendix H) for each nursery operating under a compliance agreement for meeting the federal Emergency Order.

2. The contract managers for this Agreement are:

FOR CDFA:		FOR CONTRACTOR:		
Name:	William Sandige	Name:	Cato Fiksdal	
Section/Unit:	PHPPS/Pest Exclusion Branch	Section/Unit:	County Agricultural Commissioner	
Address:	1220 N Street, Room A-372	Address:	12300 Lower Azusa Road	
City/Zip:	Sacramento, CA 95814	City/Zip:	Arcadia, CA 91006	
Phone:	(916) 654-0312	Phone:	(626) 575-5451	

3 See Appendix A thru G, to this Scope of Work, for a detailed description of work to be performed and duties of all parties.

Scope of Work for *Phytophthora ramoum* In Non-Infested Counties March 1-2004-February 28, 2005 FY 2003/2004 and 2004/2005

Index

Scope of Work

Sudden Oak Death County Work Plan Form

Appendix A National Survey Protocol

4 Appendix B - Confirmed Nursery Protocol

Appendix C - Pest Exclusion Advisory 9-2004

- 6. Appendix D
 - 1. PE Advisory 12-2004 Regulatory Actions Required at Trace Forward Locations
 - 2. PE Advisory 15-2004 Regulatory Actions Required at Trace Forward Locations
 - 3. PE Advisory 18-2004 Regulatory Action Required at Trace Forward Locations

Appendix E

- 1. Amended Federal Order Restricting Movement Of Nursery Stock From California Nurseries April 22, 2004
- 2. Draft Interim Federal Rule
 - a. Phyto Advisory 3-2004 Statewide Federal Quarantine for Sudden Oak Death
 - Phyto Advisory 4-2004 Statewide Federal Quarantine for Sudden Oak Death
- 8 Appendix F PE Advisory 13-2004 Sudden Oak Death Compliance Agreement Data Collection Website
- 9. Appendix (Monthly Work Report
- 10. Appendix II USDA/APHIS PPQ Tracking Log

cdfa

Workplan for Sudden Oak Death Statewide Emergency Response in Non-Infested Counties FY 2003/2004

From March 1, 2004 through June 30, 2004

County:		
Date:		
Cost Per Hour:	\$0.00	(including overhead expenses not to exceed 25%)

Number of Facilities Requiring Activity	Estimated Visits/Year/Facility	Estimated Hours/Visit	Total Hours	Estimated Annual Cost
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Workplan for Sudden Oak Death Statewide Emergency Response in Non-Infested Counties FY 2004/2005 From July 1, 2004 through February 28, 2005

County:		
Date:		
Cost Per Hour:	\$0.00	(including overhead expenses not to exceed 25%)

Activity	Number of Facilities Requiring Activity	Estimated Visits/Year/Facility	Estimated Hours/Visit	Total Hours	Estimated Annua Cost
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Implementation of Confirmed Nursery Protocol (wholesale/production nurseries)				0	
implementation of Positive Retail Nursery Protocol (P.E. Advisory 19-2004)				0	7 77 77 77 77
Frace Forward/Trace Back Survey	Frings of Landing to the fi				
Inspection, Submission of Samples, Regulatory Activity (hold notices, etc.)				0	
Quarantine Enforcement					
Inspection, Submission of Samples, Regulatory Activity (hold notices, etc.)				0	
Issuance of Compliance Agreement for Emergency Order (March, 2004)				0	
Issuance of Compliance Agreement for Emergency Order (April 22, 2004)				0	
Data Entry				0	2
Monitoring				0	,.
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Other			أعدت القرائدة فالمساد والمراج	T	
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Scope of Work for Phytophthora ramoum In Non-Infested Counties March 1-2004-February 28, 2005 FY 2003/2004 and 2004/2005

Appendix A

National Survey Protocol

Cooperative Agriculture Pest Survey program



Phytophthora ramorum 2004 National Nursery Survey



United States Department of Agriculture
Animal and Plant Health Inspection Service
Plant Protection and Quarantine

2004 Surveyors' Manual Revision 05/05/04

I. Introduction

Sudden Oak Death Disease - General Information

Since 1995, large numbers of oaks and tanoaks have been dying in the coastal counties of California. Since then, many other types of plants have been found to be infected or associated with this disease, referred to as Sudden Oak Death, ramorum leaf blight or ramorum dieback, or by regulation as *Phytophthora ramorum* (Pr). *Phytophthora ramorum* was first seen in 1995 in Mill Valley (Marin County) on tanoak. Since April, 2004, the disease has been confirmed in twelve coastal California counties (Marin, Santa Cruz, Sonoma, Napa, San Mateo, Monterey, Santa Clara, Mendocino, Solano, Alameda, Contra Costa, and Humboldt) and in Curry County, Oregon.

As of December, 2003, these European Countries are known to have positive finds of P. ramorum: Belgium, Denmark, England, France, Germany, Ireland, Netherlands, Norway, Slovenia, Spain (in Mallorca, Islas Baleares), and Sweden. There has also been a report of one isolated nursery detection in Poland.

The National Nursery Survey Program

This is a national survey designed to gather information on the distribution of the disease known as sudden oak death, ramorum blight and ramorum die-back caused by the pathogen, *Phytophthora ramorum*. The National Survey efforts will be concentrated in two areas, forests (coordinated by USDA Forest Service) and in nurseries (coordinated by APHIS).

This document focuses on the APHIS National SOD nursery survey. The survey design reflects our experience with this disease on the west coast and available information on the European experience. Thus host lists and symptomology are based on what has been observed on the west coast and in Europe. If surveying in other parts of the country, look at related hosts and look for similar symptoms Pay particular attention to any foliar or dieback symptoms on hosts such as Viburnum, Camellia, and Rhododendron as symptom expression can be highly variable on these hosts.

Federal funds will be made available for the 2004 survey. This year's survey is based on experiences from the 2002 and 2003 surveys during which we learned many important details such as information in CA where nursery stock was found infected and the availability of laboratory testing facilities and procedures.

This survey is being coordinated nationally by:

Daniel J. Williams, Assistant to the National Survey Coordinator; and Program Manager for the National SOD Survey(301-734-8723); <u>Daniel J. williams@aphis.usda.gov</u>

Donald Givens, Program Manager in the Western Regional Office (970-494-7564); donald.r.givens@aphis.usda.qov

Lloyd Garcia, Program Manager in the Eastern Region Office (919-855-7338); lloyd.e.garcia@aphis.usda.gov

Jonathan Jones, National SOD Trace Back Program Manager

II. Biological Information

General Plant Pathology - Phytophthora ramorum biology

IDENTITY

Name: Werres et al.

Synonyms: none

Taxonomic Position Stramenopila; Subclass Oomycetes

Common Name: Sudden Oak Death

Phytophthora ramorum, the causal agent of sudden oak death, is known to occur in coastal forests and a few horticultural nurseries in the western United States and in nurseries and landscape plantings in Europe. There are two types of P. ramorum that are genetically distinct: the A1 mating type found in Europe and the A2 mating type in North America. During the summer of 2003, P. ramorum was isolated from infected Viburnum and Pieris cultivars in a northern Oregon nursery and Camellia cultivars from a southern Oregon nursery. Oregon nursery and forest isolates, as well as European isolates were paired to test for mating types. Mating type tests revealed that isolates from the northern Oregon nursery were the A1 mating type, while isolates from the southern nursery were A2. This is the first report of P. ramorum mating type A1 in the United States. Interestingly, a single isolate of mating type A2 was recently detected for the first time in Belgium. This was the first detection of the A2 mating type in Europe; however for Europe, the pathogen is still only associated with nursery plants and their forests remain unaffected.

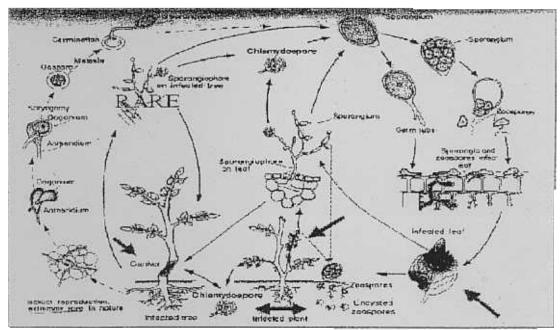


Figure 1 Hypothetical life cycle of P. ramorum

The Role of Foliar Hosts in the Disease

The more we learn more about *Phytophthora ramorum*, the more complicated the interactions between the pathogen and its hosts, and between the host plants themselves, become. The graphic above follows a hypothetical life cycle for *P. ramorum*. Notice that the spores that infect the oak trunk very rarely come from the leaves of the oak tree, but are more likely to come from the leaves of an adjacent host plant.

Recognizing Disease Symptoms

Sent By

(See Addendum 1 to view foliar, stem symptoms on the described below)

As disease expression takes place some time after the buds break, for all host genera the survey must be targeted after the spring flush has started, when some of the leaves have fully expanded (expected to be about a month after bud-break). Later is better than sooner, but not much later. On broad leaf hosts in Europe, leaf and shoot infections have to date been found on holm oak, and sweet chestnut.

On conifers in the USA, the pathogen causes a needle blight and dieback of young shoots of Douglas fir, coastal redwood and grand fir.

On yew, symptoms are a needle blight of the young foliage resulting in an aerial dieback.

On Rhododendron, P. ramorum causes a shoot/twig and leaf blight. Affected shoots or twigs develop a brown to black discoloration that spreads along the twig and can spread into the leaves via leaf petioles. Characteristic symptoms include blackening of the petiole (leaf stalk), leaf base and leaf tip and may extend along the mid-rib. Twig cankers can lead to wilting of shoots; in such cases leaves remain attached but may not develop any spots. Leaf infection can also occur without twig infection. Roots are unaffected. Symptoms are similar to those caused by other Phytophthora spp. on rhododendron, but the development of symptoms can be more rapid.

On *Viburnum*, infection commonly occurs at the stem base causing wilting and then death. The pathogen may also cause brown to black leaf infections, especially on evergreen species and can also affect flowers.

On *Pieris* and *Vaccinium*, it causes brown stem lesions that lead to aerial dieback and leaf symptoms as described on rhododendron.

On *Hamamelis* (witch-hazel), symptoms are similar to rhododendron, but symptoms on leaves mainly occur at the tip and edge and are delimited by the veins.

On Camellia, Kalmia, Syringa (lilac) and Leucothoe, the pathogen usually only causes leaf infections. Leaf lesions are usually brown to black areas, typically occurring at the tip or edges of the leaves. On camellia, some shoots have also been found infected leading to dieback.

Diseases with Similar Symptoms

Other Oak Disorders with Similar Symptoms: Sudden Oak Death can be confused with many other disorders of oaks. Oaks defoliated by insects may appear dead, but leaves usually reflush later in the season. Canker rots, slime flux, leaf scorch, root diseases, freeze damage, herbicide injury, and other ailments may be confused with this disease.

III. Host Information

Phytophthora ramorum Host List (see Addendum IV)

What Plants to Survey:

Genera with high susceptibility to infection by P. ramorum. Currently, those are:

- Camellia
- Lithocarpus
- Pieris
- Rhododendron*
- Viburnum*
- Vaccinium
- Umbellularia
- For other known susceptible plant genera, see the list under "Additional Host Information", below.
- * If the above list were by demonstrated susceptibility within nurseries, Rhododendron and Viburnum would likely be at the top of the list.

Additional Host Information

Researchers have been working in their laboratories to see what plants might be possible hosts should this pest spread into new areas.

Phytophthora ramorum Host List (see Addendum IV).

The list (see "APHIS Lists" posted at http://www.aphis.usda.gov/ppq/ispm/sod) for confirmed hosts and plants associated with *Phytophthora ramorum*. Use the genera from this list to help target your nursery and environs survey. The genera on that list as of December 2003 are:

Acer
Aesculus
Arbutus
Arctostaphylos
Camellia
Hamamelis
Heteromeles
Lithocarpus
Lonicera
Pieris
Pseudotsuga
Quercus
Rhamnus

- RhododendronSequoia
- TrientalisUmbellularia
- Vaccinium
- Viburnum
- **ALSO**
- Abies
- Aesculus
- Corylus
- Fagus
- Kalmia
- Leucothoe

The active ingredient level must be measured at the sprinkler head, otherwise the treatment is not effective.

APPENDIX B BIOSECURITY AND DISINFECTION METHODS

If it is practicable, tools such as knives, pruners, water breakers, water wands and other implements used in the buffer area should only be used in the buffer area. If tools and other implements must be moved from the buffer area, then regular disinfection using an appropriate disinfectant for the control of *P. ramorum* (such as 1/9 solution of chlorine bleach or 70% or better solution of ethanol) is recommended prior to removal from the buffer area.

A disinfectant foot bath should be placed and used by personnel entering and exiting the buffer area "hot zone" at the infested facility, where the movement of soil or plant debris on footwear is likely. The foot bath must be filled with fresh disinfectant on a daily basis. Use of disposable shoe covers may be used in lieu of a footbath, if disposed of immediately upon exit from the buffer. The disposable shoe covers must bagged and incinerated.

Everyone entering and leaving the facility must scrape off loose pieces of soil. Those working with, or in contact with suspected infected material (including plants), must wash hands using soap, or disinfectant immediately after completion of task.

Host material (including leaf litter) must not be placed in compost piles or be removed from the facility as trash or in debris removal. Host material should be collected and incinerated or double bagged and deep buried in a site approved by USDA, APHIS or delegated regulatory authority.

The tires (or other parts in contact with the soil) of vehicles must be cleaned of loose soil before leaving the infested facility.

Do not visit other commercial operations in potentially contaminated work clothing and footwear. Where it is necessary that visitors enter the facility, the facility should ensure that every precaution is taken to prevent the movement of infected plants, contaminated soil or debris with the visitor.

Clorox (sodium hypochlorite) is labeled (EPA Reg. No 5813-50) for treatment of water (~50 ppm available chlorine) measured at the sprinkler head) for controlling the spread of *Phytophthora lateralis* (Port Orford Cedar Root Disease) for water used for dust abatement, fire suppression and equipment cleaning.

 Treatments reported *(Erwin and Ribeiro 1996) as effective against other Phytophthora species include copper naphthenate for the treatment of wood surfaces, sodium hypochlorite, quaternary ammonium and hydrogen peroxide

(Zerotol) for surface disinfestation, and sodium tetrathiocarbonate, methyl bromide and chloropicrin, and metham sodium (Vapam) as soil treatments.

* Erwin, D. C. and O. K. Ribeiro. 1996. Phytophthora Diseases Worldwide. APS Press St. Paul, MN.

APPENDIX C BEST MANAGEMENT PRACTICES FOR NURSERIES

These Best Management Practices (BMP's) are designed to control or eliminate the diseases caused by *Phytophthora ramorum*.

The control of *P. ramorum* spread is based on the establishment of multiple hurdles or barriers to the pathogen with a purpose of minimizing the risk of introduction or survival of the SOD pathogen in a nursery. The BMP's assure the monitoring of the functionality of the process controls for the pathogen.

Each nursery facility is expected to review these and employ some or all of these practices depending upon their physical location and plant products that are handled. Nurseries are encouraged to incorporate these BMP's into their Standard Operating Procedures.

The BMP's have been divided into three categories:

- Exclusion Prevention
- Monitoring

The following BMPs should be considered for preventing the establishment or spread of diseases caused by *P. ramorum*:

Exclusion:

- No overstory or understory of known *P. ramorum* hosts on nursery growing grounds unless there is regular monitoring of those hosts.
- Confirm host stock is propagated from materials originating on site or is received from shipping nurseries (in SOD-regulated areas) under compliance agreements.
- All incoming host plants (buy-ins, transfers ...), regardless of origin, should be visually inspected for symptoms of *P. ramorum* by trained nursery personnel prior to being incorporated into the production facility.

Prevention:

• Effective fungicide program for the control of *Phytophthora* on susceptible host plants (research in progress, results pending.).

Off load incoming shipments to an area that can be cleaned of the leafy debris. Sweep debris from the receiving pad and the delivery truck; collect debris and bag for disposal.

Avoid product returns of nursery stock from a receiver in a regulated area. If unavoidable, contact your State Regulatory Official (if in California your County Agricultural Commissioner) prior to accepting the nursery stock return.

Monitoring:

- Nursery personnel should attend one or more SOD trainings. Training is available
 through the California Oak Mortality Task Force, USDA Forest Service,
 California Department of Food and Agriculture, California County Agricultural
 Commissioners, and other qualified personnel. SOD training may also be
 available through State Agriculture Departments, and Universities in other States.
- All host buy-ins should be isolated from other hosts plants and periodically inspected for symptoms of the disease over the course of a growing season.
- Monitor host and associated plants in surrounding area for symptoms of *P. ramorum* in Spring/Summer.
- Identify sources of disease recognition fact sheets, and/or develop and distribute disease recognition fact sheets on host plants to educate all field nursery personnel.
 - Record Keeping: Maintain accurate shipping documentation identifying product, amount, date and origin or receiver for the purpose of identifying trace backs and trace forwards.

If the disease is found in your area, these BMPs should be followed:

- Install diversion burms to prevent soil and water movement, during storm-related events, from hillsides populated with *P. ramorum* host plants.
- Place containers/pots on a soil barrier, such as gravel or on raised beds.
- Irrigation water from any source other than well or municipal water supplies should be monitored to confirm that it is free from the pathogen.
- Avoid overhead irrigation of host plants where practical. When using overhead irrigation, irrigate in the morning to allow the foliage to dry before nightfall.

APPENDIX D DIAGNOSTICS

Testing: Either ELISA or PCR methodology may be used to screen samples for the presence of *P. ramorum*. Positive ELISA or PCR test results from screening must be confirmed by culturing and isolation of the pathogen and by a second PCR confirmation of the suspect culture.

Cultures:

PARP (Phytophthora selective medium) + Morphology V8 agar medium (for identification of Phytophthora Spp. to the specific level.

Carrot agar medium (media use to promote oogonial formation).

PCR Detection

Elisa (*Phytophthora* selective diagnostic tool)
Baiting Techniques useful for extraction of *P. ramorum* from water and soil, (see Erin and Ribeiro).

APPENDIX E SAMPLING PROTOCOL

For invoiced host varieties that are infected or are implicated as infected based on sampling and testing done at the receiving nursery:

Treat each variety as the group of regulated articles for sampling purposes. Therefore, follow the protocol described in 7 CFR 301.92-1 and inspect each plant if 100 or fewer. If more than 100 then inspect 100 plus 2% of those exceeding 100. Plants to be inspected from each variety will be randomly selected from throughout the nursery. If symptomatic plants are found the inspector must collect at least one sample per symptomatic plant.

If fewer than 40 symptomatic plants are found adjacent to symptomatic plants, then the inspector must collect samples from non-symptomatic plants so that the total number of sampled plants is at least 40.

For hosts in the nursery that are the same as those invoiced above, but are not the varieties invoiced:

- Combine all the remaining varieties of a particular host and treat them as one group of regulated articles for sampling purposes following 7 CFR 301.92-11 as described above.
- Plants to be inspected will be randomly selected from throughout the nursery and will include as many varieties of that host as possible, excluding those already sampled.

For all other hosts and associated hosts in the nursery:

Combine all and treat as one group of regulated articles for sampling following 7 CFR 301.92-11 as described above.

APPENDIX F LIST OF RESOURCES & CONTACTS

Jonathan M. Jones National Phytophthora ramorum Program Manager USDA, APHIS, APHIS Invasive Species and Pest Management

Donald R. Givens Western Regional Program Manager Phytophthora ramorum Program USDA, APHIS, PPQ

4700 River Road, Unit 134 Suite 5B16 Riverdale, MD 20737

Tel: 301-734-8247 Fax: 301-734-8584 Email: <u>jmjones@aphis.usda.gov</u>

Dr. Lloyd E. Garcia
Eastern Regional Domestic Program Manager
Phytophthora ramorum Program
USDA, APHIS, PPQ
920 Main Campus Drive, Suite 200
Raleigh, NC 27806
Tel: 919-716-5709 Fax: 919-716-5656
Email: Lloyd E. Garcia (a) aphis . usda. gov

Rob Ormrod
Horticulture Program Specialist
Canadian Food Inspection Agency (CFIA)
1905, Chernin Kent
Kelowna (C.-B) V1Y 7S6
Canada

Tel: 250-470-4893, Fax: 250-470-4899 Email: <u>ormrodr@inspection.gc.ca</u>

Dr. Cheryl Blomquist
Associate Plant Pathologist (Diagnostician)
California Department of Agriculture (CDFA)
Plant Pest Diagnostics Branch
3294 Meaclowview Road
Sacramento, CA 95832
Tel: 916-262-1870 Fax: 916-262-1190
Email: cblomquist@cdfa.ca.goy

Art Wagner
Plant Pathologist
Washington State Department of Agriculture
Plant Protection Division
3939 Cleveland Ave. SE
Olympia, WA 98501
Tel: 360-586-5309, Fax: 360-586-5286
Email: awagner@agr.wa.gov

Dr. Mary Palm
Plant Pathologist
USDA, APHIS, PPQ, CPHST
Rm. 329, B-011A
BARC-West
Beltsville, MD 20705-2350
Tel: 301-504-532 7, Fax: 301-504-5810
Email: mary.palm@aphis.usda.gov

Dr. Laurene E. Levy Plant Pathologist Laboratory Director USDA, APHIS, PPQ-CPHST NPGPL Bldg. 580, BARC-East Powder Mill Road Beltsville, MID 20705 2150 Centre Avenue, Bldg. B Fort Collins, CO 80526 Tel: 970-494-7564 Fax: 970-494-7501 Email: donald.r.givens@aphis.usda.gov

Shane Sela
Canadian Food Inspection Agency (CFIA)
Forest Specialist
Western Area Plant Protection Program Network
#103-4475 Viewmont Ave
Victoria, B.C. V8Z 6L8
Canada
Tel: 250-363-3432 Fax: 250-363-0144
Email: selas@inspection.gc.ca

Dr. David T. Kaplan
National Science Program Leader, IPM &
Eradication
Center for Plant Health Science and Technology
USDA, APHIS, PPQ
1017 Main Campus Drive, Suite 2500
Raleigh, NC 27606-5508
Tel: 919-513-5090, Fax: 919-513-248
Email: david.t.kaplan@aphis.usda.gov

Dr. Kathleen L. Kosta
Senior Plant Pathologist
California Department of Food and Agriculture
Pest Detection Emergency Projects
3288 Meadowview Rd
Sacramento, CA 95832
Tel: 916-262-0855 Fax: 916-262-2059
Email: KKosta@cdfa.ca.gov

Dr. Nancy Osterbauer
Plant Pathologist
Oregon Department of Agriculture
Plant Division
635 Capitol Street, NE
Salem, OR 97301
Tel: 503-986-4661, Fax: 503-986-078
Email: nosterba@oda.state.or.us

Jim Pheasant
NAPIS Administrator
CERIS/NAPIS
1231 Cumberland Ave., Suite A
West Lafayette, IN 47906-131
Tel: 765-494-9853, Fax:
Email: pheasant@ceris.purdue.edu

Dr. Vesseia A. Mavrodieva Plant Pathologist Research Associate USDA, APHIS, PPQ-CPHST NPGPL Bldg. 580, BARC-East Powder Mill Road Beltsville, MD 20705

Tel: Tel: 301-504-7100 ext. 226 Tel: 301-504-7157, Fax: 301-504-8539 Email: Laurene.e.levy@aphis.usda.gov

Dr. Matteo Garbelotto Adjunct Professor, Extension Specialist UC Berkeley 151 Hilgard Hall, #3110 Berkeley, CA 94720-3110 Tel: 510-643-4282, Fax:

Email: matteo@nature.berkelev.edu

Dr. Everett Hansen Plant Pathologist Oregon State University Botany and Plant Pathology Cordley Hall Corvallis, OR 97331

Tel: 541-737-5243, Fax: 541-737-3573

Email: hansene@bcc.orst.edu

Susan Frankel Plant Pathologist USDA, Forest Service, State and Private Forestry 1323 Club Drive Vallejo, CA 94592 Tel: 707-562-8917, Fax: 707-562-9054

Email: sfrankel@fs.fed.us

Dr. Paul Tooley USDA, ARS **FDWSRU** 1301 Ditto Ave. Fort Detrick, MD 21702-5023 Tel: 301-619-2632, Fax: Email: ptooley@fdwsr.ars.usda.gov or

tooley@nciferf.gov

Alan Kanaskie Oregon Department of Forestry 2600 State Street Salem, OR 97301 Tel: 503-945-7397, Fax: 503-945-7416 Email: alan kanaskic@state.or.us

Dr. Robert Linderman USDA, ARS Horticultural Crops Research Laboratory 3420 Orchard Ave. Corvallis, OR 97330

Tel: 541-738-4062 Fax: 541-738-4025 Email: lindermr@science.oregonstate.edu Tel: 301-504-7100 ext. 233 or 230 (Lab) Fax: 301-504-8539

Email: vessela.a.mavrodieva@aphis.usda.gov

Dr. Dave Rizzo Associate Professor of Plant Pathology Department of Plant Pathology UC Davis One Shields Ave. Davis, CA 95616

Tel: 530-754-9255 or -5674 Fax: 530-752-5674

Email: dmrizzo@ucdavis.cdu

Dr. Jennifer Parke Associate Professor (Senior Research) Dept. of Crop & Soil Science ALS 3017 Oregon State University Corvallis, OR 97331 Tel: 541-737-8170, Fax: 541-737-5725

Email: Jennifer.Parke@oregonstate.edu

Dr. Kerry O. Britton Plant Pathologist National Pathologist for Forest Health Protection USDA, Forest Service 1601 N. Kent Street, RPC-7 Arlington, VA 22209 Tel: 703-605-5347, Fax: Email: kbritton01@fs.fed.us

Dr. Nina Shiskoff USDA, ARS **FDWSRU** 1301 Ditto Ave. Fort Detrick, MD 21702-5023 Tel: 301-619-2877, Fax: 301-619-2880 Email: nshishkoff@fdwsr.ars.usda.gov

Ellen M. Goheen Plant Pathologist USDA Forest Service 2606 Old State Rd. Central Point, OR 97502

Tel: 541-858-6126 Fax: 541-858-6110

Email: egoheen@fs.fed.us

APPENDIX G APHIS LIST OF REGULATED AND ASSOCIATED PLANTS FOR PHYTOPHTHORA RAMORUM

Plant species regulated for *Phytophthora ramorum* (these are regulated in whole or in part, see www.aphis.usda.gov/ppq/ispm/sod)

California buckeye Acer macrophyllum Bigleaf maple Aesculus californica Arctostaphylos manzanita Manzanita Arbutus menziesii Madrone Sasangua camellia Camellia Camellia sasanqua Camellia japonica Heteromeles arbutifolia Witch hazel Toyon Hamamelis virginiana California honeysuckle Lonicera hispidula Lithocarpus densiflorus Tanoak Pieris floribunda x japonica Picris 'Bouwer's Beauty'Pieris japonica Japanese pieris Pieris formosa x japonica Pieris 'Forest Flame' Pieris formosa Himalaya Pieris Pseudotsuga menziesii var. menziesii Douglas-fir Quercus agrifolia Coast live oak Quercus chrysolepis Canyon live oak Quercus kelloggii California black oak Quercus parvula v. shrevei Shreve oak Rhamnus californica California coffeeberry Rhododendron Sequoia sempervirens Coast redwood Rhododendron spp Huckleberry Western starflower Vaccinium ovatum Trientalis latifolia Umbellularia californica California bay laurel, pepperwood, Oregon myrtle Viburnum plicatum var. tomentosum Mariesii, doublefile viburnum Viburnum tinus Laurustinus Viburnum x bodnantense Bodnant Viburnum

Plant species associated with P. ramorum (these are not currently regulated, see

Plant species associated with P. ramorum (these are not currently regulated, see www.aphis.usda.gov/ppq/ispm/sod)

Aesculus hippocastanum Horse chestnut Abies grandis Grand fir Camellia reticulata Arbutus unedo Strawberry tree Castanea sativa Sweet chestnut Camellia x williamsii Fagus sylvatica European beech California Corylus cornuta Kalmïa latifolia Mountain laurel Leucothoe fontanesiana Rhamnus purshiana Cascara Picris formosa var. forrestii Pierts formosa var. forrstii x Pieris japonica Pittosporum undulatum Victorian box Quercus falcata southern red oak Ouercus ilex Holm oak Quercus ruhra European turkcy oak northern red oak Ouercus sativa Rosa gymnocarpu Wood rose Rubus spectabilis Salmonberry Syringa vulgaris Lilac Taxus baccata European yew Vaccinium vitis-idaea Lingonberry Toxicodendron diversiloba Poison oak David Viburnum Viburnum farreri (=V. fragrans) Fragrant Viburnum Viburnum davidii Viburnum lantana Wayfaringtree Viburnum Viburnum opulus European cranberrybush viburnum Burkwood Viburnum Viburnum x carlcephalum x V. utile Viburnum x burkwoodii

Viburnum x pragnense Prague viburnum

Scope of Work for *Phytophthora ramoum*In Non-Infested Counties
March 1-2004-February 28, 2005
FY 2003/2004 and 2004/2005

Appendix C

. Pest Exclusion Advisory 19-2004



PEST EXCLUSION ADVISORY

NO. 19-2004

DATE: May 7, 2004

TO: All County Agricultural Commissioners

FROM Plant Health and Pest Prevention Services

SUBJECT: UPDATE - Required Actions at Phytophthora ramorum-Positive Nurseries

This is an update to Pest Exclusion Advisory 17-2004. The following actions must be taken at nurseries that are positive for *Phytophthora ramorum*.

Non-Infested Area Nurseries

Retail Nurseries/Garden Centers*

At any P. ramorum positive retail nursery/garden center the following actions must occur

- a. Infected lot(s) must be destroyed. A lot is defined as any species or variety of the same pot size from the same growing origin.
- b All hosts and associated hosts at the nursery must be inspected for symptoms of Sudden Oak Death (SOD).
- Samples must be collected from all symptomatic hosts and associated hosts.
- Symptomatic host and associated host plants must be placed under nursery stock noncompliance hold.
- All host and associated host plants that test positive, and the respective lot, must be destroyed.

Production Nurseries/Wholesale Brokers*

At any P. ramorum positive production nursery or wholesale broker the following actions must occur

Intrastate Shippers - If the nursery does not intend to ship SOD hosts and associated hosts interstate then the United States Department of Agriculture (USDA) Confirmed Nursery Protocol dated April 7, 2004, and amendment dated April 30, 2004 (attached), must be implemented. As amended for intrastate shippers, the USDA Confirmed Nursery Protocol does not require a hold on all genera of hosts and associated hosts. Only SOD hosts and associated hosts (not genera) must be placed on hold until delimitation within and outside of the nursery is completed.

- 2 Interstate Shippers If the nursery intends to ship SOD hosts and associated hosts interstate, the following action must occur:
 - a. Compliance agreement (if issued) for interstate shipping of host and associated hosts will be suspended.
 - b. If the nursery intends to continue shipping hosts and associated hosts interstate, the USDA Confirmed Nursery Protocol must be implemented, including a hold on all genera of host and associated hosts.

Pest Exclusion Advisory No. 19-2004 Page 2 May 7, 2004

> c. Compliance agreements for interstate shipping of host and associated hosts will be re-issued after delimitation according to the confirmed nursery protocol is completed, including sampling, and testing with negative results.

Mixed Retail/Production Nursery*

At any *P. ramorum* positive nursery location that has a retail and production/wholesale component, the appropriate actions (see above) must be applied to any portion of the nursery where *P. ramorum* positive plants were grown or stored. The appropriate action must only be applied in the affected portion of the nursery. Inspectors should use their judgement in delineating the retail sales area from the production/wholesale area when implementing the appropriate actions.

Infested Area Nurseries

At any *P. ramorum* positive nursery within the infested area that intends to ship host and associated hosts out of the infested area the following actions must occur:

Compliance agreement must be suspended.

- If the nursery intends to continue shipping hosts and associated hosts out of the infested area the USDA Confirmed Nursery Protocol must be implemented.
- Compliance agreement for interstate shipping of hosts and associated hosts will be reissued after delimitation according to whether the USDA Confirmed Nursery Protocol is completed, including sampling and testing with negative results.

For nurseries within the 12-county infested area that do not ship out of the infested area, detections of *P. ramorum* should be dealt with following nursery stock cleanliness standards. The nursery stock standard of cleanliness for *P. ramorum*, a Q-rated pest, requires that the stock shall be kept "free of", California Code of Regulations (CCR) Section 3060.2 (b)(2). Such stock (the lot) is subject to disposal in a manner satisfactory to the County Agricultural Commissioner or may be sold under a written agreement between the buyer and seller in accordance with CCR Section 3060.4 (a)(1)(D).

* In order to ensure that the correct actions are taken at each *P. ramorum* positive nursery, please determine the class of the nursery stock license.

Any questions concerning this advisory may be directed to Courtney Albrecht at (916) 653-1440, or by e-mail at calbrecht@cdfa.ca.gov.

Attachments

Scope of Work for *Phytophthora ramoum*In Non-Infested Counties
March 1-2004-February 28, 2005
FY 2003/2004 and 2004/2005

Appendix D

- 1. Pest Exclusion Advisory 12-2004
- 2. Pest Exclusion Advisory 15-2004
- 3. Pest Exclusion Advisory 18-2004



STATE OF CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE 1220 N Street, Room A-372 Sacramento, CA 95814

PEST EXCLUSION ADVISORY

NO. 12-2004

DATE:

April 2, 2004

TO:

All County Agricultural Commissioners

FROM:

Plant Health and Pest Prevention Services

SUBJECT:

Regulatory Actions Required at Trace Forward Locations

This is an update to Pest Exclusion Advisory (PEA) 07-2004 that instructed counties on the regulatory actions to take at nurseries that received *Phytophthora ramorum* host material from Monrovia Nursery in Azusa, CA and Specialty Plants in San Marcos, CA. Both of these nurseries were determined to be infested with *P. ramorum* through the Statewide Nursery Survey that was begun in February 2004. Trace forward investigations determined that over 380 nurseries statewide received plants from Monrovia Nursery in Azusa. PEA 07-2004 instructed that all plants from Monrovia in Azusa that remain at each trace forward location **must be placed on hold** until further notice.

The following procedures are to be followed at trace forward locations where plants from Monrovia remain on hold:

Isolate or segregate plants identified from trace forward procedures.

- 2. Inspect trace forward plants for symptoms of Sudden Oak Death.
- Take samples from symptomatic and asymptomatic trace forward host plants, up to a maximum of 40 samples per nursery.
- 4. Record which plants were sampled, and map their location at the nursery. Follow the sanitation instructions in the attached "Trace Forward Protocol".
- Submit samples to the California Department of Food and Agriculture (CDFA) Plant Pest Diagnostics Laboratory to test for the presence of P. ramorum.
- 6. If test results are negative, release all plants.

If test results are positive, the regulatory action will depend on whether or not the nursery ships hosts of *P. ramorum* out-of-state.

- a. For Nurseries that intend to Ship Out-of-State:
 - Follow the <u>Protocol for Nurseries with Plants Infected with P. ramorum</u>, January 12, 2004, Fourth Draft (see Pest Alert 1-2004). Certification to meet the revised Federal Domestic Quarantine for *P. ramorum* (CFR 301.92) cannot be issued until the nursery is determined to be free of *P. ramorum*.

Pest Exclusion Advisory NO. <u>12-2004</u> Page 2 April 2, 2004

- b. For Nurseries that Do Not Ship Out-of-State:
 - Destroy all plants that tested positive plus all P. ramorum host plants within two
 meters under official supervision. Approved disposal methods are incineration or deep
 burial. Instructions on disposal can be found in <u>Protocol for Nurseries with Plants
 Infected with P. ramorum</u>, Appendix A.
 - Place a hold order on all hosts of P. ramorum within 10 meters of the two-meter destruct zone. Record the number and kind of plants on hold, notify CDFA, and wait for further instructions.
- 8. If samples have already been taken and the results are positive, follow the above instructions beginning with number seven.
- 9. If the trace forward nursery is <u>outside</u> of one of the <u>12 infested counties</u> and has entered into a compliance agreement to meet the revised Federal Domestic Quarantine (CFR 301.92), determine if the plants from Monrovia have already been sampled and have been found free of *P. ramorum*.
 - a. If the plants from Monrovia have not been sampled, the compliance agreement must be temporarily cancelled and testing according to the sampling procedures listed above must be followed.
 - If results are negative, the nursery may re-enter the compliance agreement.
 - If results are positive, the <u>Protocol for Nurseries with Plants Infected with P. ramorum</u> must be followed until the nursery is determined to be free of *P. ramorum*.
 - b. If the plants from Monrovia have been sampled (with negative results) the compliance agreement may remain in effect.

If you have any questions regarding this advisory, please contact Courtney Albrecht at (916) 653-1440, or by e-mail at calbrecht@cdfa.ca.gov.

Attachment

Pest Exclusion Advisory NO. <u>12-2004</u> Page 2 April 2, 2004

- b. For Nurseries that Do Not Ship Out-of-State:
 - Destroy all plants that tested positive plus all P. ramorum host plants within two
 meters under official supervision. Approved disposal methods are incineration or deep
 burial. Instructions on disposal can be found in <u>Protocol for Nurseries with Plants</u>
 Infected with P. ramorum, Appendix A.
 - Place a hold order on all hosts of P. ramorum within 10 meters of the two-meter destruct zone. Record the number and kind of plants on hold, notify CDFA, and wait for further instructions.
- 8. If samples have already been taken and the results are positive, follow the above instructions beginning with number seven.
- 9. If the trace forward nursery is <u>outside</u> of one of the <u>12 infested counties</u> and has entered into a compliance agreement to meet the revised Federal Domestic Quarantine (CFR 301.92), determine if the plants from Monrovia have already been sampled and have been found free of *P. ramorum*.
 - a. If the plants from Monrovia have not been sampled, the compliance agreement must be temporarily cancelled and testing according to the sampling procedures listed above must be followed.
 - If results are negative, the nursery may re-enter the compliance agreement.
 - If results are positive, the <u>Protocol for Nurseries with Plants Infected with P. ramorum</u> must be followed until the nursery is determined to be free of *P. ramorum*.
 - b. If the plants from Monrovia have been sampled (with negative results) the compliance agreement may remain in effect.

If you have any questions regarding this advisory, please contact Courtney Albrecht at (916) 653-1440, or by e-mail at calbrecht@cdfa.ca.gov.

Attachment

Phytophthora ramorum - Sudden Oak Death, ramorum blight, ramorum die back 19 March 2004

"Trace Forward Protocol"

Protocol for nurseries with plant material shipped from a confirmed
P. ramorum infested nursery.

Before inspection:

- 1. Notify state officials of your plans to inspect.
- 2. Coordinate visit with State inspector.

Survey/Inspection Procedure:

- 1. Identify yourself and agency to greenhouse/nursery owner/manager.
- 2. Tell greenhouse/nursery owner/manager the purpose of your visit.
- 3. Obtain copies of shipping documents related to target plants received from a confirmed *P. ramorum* infested nursery and forwarded to other nurseries or retail facilities.
- 4. Ask owner/manager to fill out questionnaire (attached).
- 5, Complete an Emergency Action Notification (EAN, PPQ form 523) to place a hold on target plants from the infested nursery and other host plants, products or articles that present a risk of spreading *Phytophthora ramorum* (e.g., growth media, equipment). Segregate the plants away from other host plants (see Table 1) as best as can be done.

Use this language in Section 16- Action Required:

All plant shipments of the following listed species received from any infested nursery in California during the period from March 2003 to March 2004 are prohibited from movement pending further notification by USDA APHIS PPQ. See the attached (Table *P. ramorum* host and associated host list for the nursery target plants and varieties.

- 6. Visually inspect any host plants for symptoms. Symptomology is described and illustrated in two nursery guides that may be viewed and printed from http://www.suddenoakdeath.org/. See Table 1, attached to this document, for the list of hosts as of 13 February 2004. Symptoms may include:
 - a. Leaf spots
 - b. Twig dieback
 - c. Stem cankers

Note: Instructions to commence sampling will be sent out from Riverdale, MD when the diagnostic laboratories are ready to accept samples. Listed below are sampling protocols to use at that time:

7. If practical and possible collect a minimum of 40 samples (symptomatic and/or asymptomatic) for testing. The number of samples taken will be contingent on the number of plants at the nursery that came from an infested nursery (such as if only

5 plants are on hand then take fewer samples than 40). The minimum sample should be what is appropriate for each location to insure a thorough job is done.

- a. Fill out PPQ Form 391 (Name of host, variety, state code, facility code, etc.).
- b. Assign a unique sample number using the following conventions: XX-ABC-0001
 - where XX is your two-letter state code, ABC is a three-letter, state-assigned facility code, and 0001 is the sample number for that facility.
- c. Log each sample according to the unique sample number.
- d. Double bag samples (e.g., symptomatic and/or asymptomatic leaf tissue with associated twig intact) in plastic.
- e. Label with collection date, time, location, responsible party. Be sure to write sample number on the bag containing the sample.
- f. Refrigerate, but do not freeze specimen.
- g. Submit with minimal delay to your designated laboratory for analysis.
- h. Overnight the sample if necessary.
- 8. Inspect greenhouse/nursery waste and refuse piles.
- 9 Ask owner/manager to identify "cull piles." Inspect these for plant tissue bearing symptoms. Take samples as above if host material is present.
- 10. If survey requires you to move among multiple greenhouses, disinfect tools, hands and shoes (or wear disposable gloves and booties) to prevent pathogen spread between greenhouses. If using disposable gloves and booties, be sure to dispose of these after each individual greenhouse/shade house/block inspection. Disposable gloves and booties should be bagged and disposed by burial or incineration, or in a landfill).
- 1 Isolate or at least segregate plants identified from trace forward procedure.
- 12. Sanitize/disinfect tools, hands and shoes before leaving premises, using an appropriate disinfectant for the control of *Phytophthora spp*. (such as 1/9 solution of chlorine bleach or 70% or better solution of ethanol)

Note: Plants will remain on hold until analysis is completed and a decision is made on final disposition.

Table 1. API IIS: List of Plants Regulated and Associated with *Phytophthora ramorum* This list is constantly being updated. The most current version is posted at: www.aphis.usda.gov/ppq/ispm/sod

APHIS List of Plants Regulated and Associated with Phytophthora ramorum

Last revised 13 February 2004

Plant species regulated for *Phytophthora ramorum* (these are regulated in whole or in part – see www.aphis.usda.gov/ppg/ispm/sod)

Scientific Name (28)	Common Name
Acer macrophyllum	Bigleaf maple
Aesculus californica	California buckeye
Arbutus menziesii	Madrone
Arctostaphylos manzanita	Manzanita
Camellia japonica	Japanese c amellia
Camellia sasanqua	Sasanqua camellia
Hamamelis virginiana	Witch hazel
Heteromeles arbutifolia	Toyon
Lithocarpus densiflorus	Тапоак
Lonicera hispidula	California honeysuckle
Pieris formosa	Himalaya pieris
Pieris formosa x japonica	Pieris 'Forest Flame'
Pieris floribunda x japonica	Pieris 'Brouwer's Beauty'
Pieris japonica	Japanese pieris
Pseudotsuga menziesii var. menziesii	Douglas-fir
Quercus agrifolia	Coast live oak
Quercus chrysolepis	Canyon live oak
Quercus kelloggii	California black oak
Quercus parvulav. shrevei	Shreve oak
Rhamnus californica	California coffeeberry
Rhododendron spp	Rhododendron
Sequoia sempervirens	Coast redwood
Trientalis latifolia	Western starflower
Umbellularia californica	California bay laurel, pepperwood, Oregon myrtle
Vaccinium ovatum	Evergreen huckleberry
Viburnum x bodnantense	Bodnantviburnum
Viburnum plicatum var. tomentosum	Doublefile viburnum
Viburnum tinus	Laurustinus

Plant species associated with P. ramorum, not currently regulated

Scientific Name (30)	Common Name, Date & Source of Report		
Abies grandis	Grand fir – June 03 (1)		
Asseulus hippocastanum	Horse-chestnut - Dec 03 (3)		
Arbutus unedo	Strawberry tree - Dec 02 (7)		
Comellia reticulata	Oct 03 (3)		
Camellia x williamsii	Oct 03 (3)		
Castanea sativa	Sweet Chestnut Feb 04 (3)		
Corylus cornuta	California hazelnut – Dec 02 (5)		
Fagus sylvatica	European beech – Dec 03 (3)		
Kalmia latifolia	Mountain laurel - Fall 02 (3)		
Leucothae fontanesiana	Drooping leucothoe Oct 03 (3)		
Picris formosa var. forrestii	Chinese pieris Oct 03 (3)		
Pieris formosa var. forrestii x Pieris japonica	Oct 03 (3)		
Pittosporum undulatum	Victorian box - Dec 02 (6')		
Quercus sativa	European turkey oak Feb 04 (3)		
Quercus falc ata	Southern red oak - Nov 03 (3)		
Quercus ilex	Holm oak - Dec 03 (3)		
Quercus rubra	Northern red oak – Nov 03 (8)		
Rhamnus purshiana	Cascara - Dec 02 (4)		
	Salmonberry - Dec 02 (4)		
	Lilac - 2003 (3) updated Oct 03		
The state of the s	European yew (3)		
Toxicodendron diversiloba	Poison oak - Dec 02 (4)		
Vaccinium vitis-idaea	Lingonberry - Poland, 2002 (reported by 3)		
Vihurnum davidli	David viburnum Oct 03 (3)		
Viburnum farreri (=V. fragrans)	Fragrant viburnum Oct 03 (3)		
Viburnum lantana	Wayfaringtree viburnum Oct 03 (3)		
Viburnum opulus	European cranberrybush viburnum Oct 03 (3)		
Viburnum z burkwoodii	Burkwood viburnum Octog (3)		
Viburnum x carleephalum x V. utile	Oct 03 (3)		
Viburatum v pragonse	Prague viburnum Oct 03 (3)		

California Department of Food and Agriculture
Coregon Department of Agriculture
Department for Environment, Food, and Rural Affairs, UK
Everett Hanson, Oregon State University
David Rizzo, University of California – Davis

⁶ Mateo Garbelotto, University of California - Berkeley
⁷ Eduardo Moralejo, Instituto Mediterráneo de Estudios Avanzados, IMEDEA (CSIC-UIB) -Balearic Islands, Spain
§ Plant Protection Service, Wageningen, Netherlands

STATE OF CALIFORNIA STANDARD AGREEMENT

STD 2/3 (Rev 06/03)

AGREEMENT NUMBER 03-0777 REGISTRATION NUMBER

This Agreement is entered STATE AGENCY'S NAME	into between the State Agency and the Con	tractor named below:
DEPARTMENT OF FOO	D AND AGRICULTURE	
COUNTY OF LOS ANGE	ELES	
2. The term of this		
Agreement is:	March 1, 2004 Through February 28, 200	05
3. The maximum amount	\$357,311.38	
of this Agreement is:	Three Hundred Fifty-Seven Thousand Three Hund	
 The parties agree to comply reference made a part of th 	y with the terms and conditions of the followine Agreement:	ng exhibits which are by this
Exhibit A – Scope of Work Index - including the following at Sudden Oak Death County Work I Appendix A – National Survey Pro Appendix B – Confirmed Nursery Appendix C – Pest Exclusion Advi Appendix D – 1.) Pest Exclusion A 2.) Pest Exclusion A 3.) Pest Exclusion A Appendix E – 1.) Amended Federa of Nursery Stock 2.) Draft Interim Fed Appendix F - Pest Exclusion Adv Appendix G – Monthly Work Repo Appendix H - USDA/APHIS/PPQ Exhibit B – Budget Detail and Payn Attachment 1 – 2 Pages Exhibit C – General Terms and Cor Check mark one item below as Exh Exhibit D-Special Terms (Attached hereto as part	Plan Form otocol Pages: A-1 to A-15 Protocol Pages: B-1 to B-15 isory 19-2004 Pages: C-1 to C-3 Pages: D-1 to D-8 Pages: D-1 to D-8 Pages: D-9 to D-11 Pages: D-12 Pages: D-12 Pages: B-1 to E-7 Pages: B-1 to F-5 Pages: B-1 to F-5 Pages: B-1 to B-2 Pages: B-1 to B-1	3 Pages
IN WITNESS WHEREOF, this Agreen	ment has been executed by the parties hereto.	California Department of General
OONTDA OTODIO NAME III	CONTRACTOR	Services Use Only
	ndividual, state whether a corporation, partnership, etc.)	
BY (Authorized Signature	DATE SIGNED)	
⊉ n		
PRINTED NAME AND TITLE OF PERSON	SIGNING	
ADDRESS 12300 Lower Azusa Road, Arcadia	ı, CA 91006	
ST	ATE OF CALIFORNIA	
AGENCY NAME DEPARTMENT OF FOOD AND	AGRICULTURE	
BY (Authorized Signature)	DATE SIGNED	
PRINTED NAME AND TITLE OF PERSON	SIGNING	
PAULA LEWIS, ACQUISITIONS M		
ADDRESS		
1220 N STREET, ROOM 100, SACRA		☐ Exempt per:

IV. The Survey Protocol

Nurseries

Detections in early March 2004 have increased the concern of this disease in US nurseries. To address these concerns and because of the potential and documented movement of the disease on nursery stock, systematic surveys of nurseries and their environs are appropriate.

Survey Parameters

Surveys to detect P. ramorum depend on four factors

- (1) Climatic conditions
- (2) The number and type of susceptible hosts in your state
- (3) Location where in space host, climate and pathogen overlap
- (4) Timing & the "Window of Opportunity" (favorable detection time range)

Key - Detection improves in climates where temperature and moisture conditions favor disease development. APHIS/USFS developed a disease favorability model to geospatially characterize these conditions. Conditions are favorable for this disease when In a 24 hour period temperatures are between 3C and 28C (optimum 20C); and free moisture is present on host tissue for at least 12 hours over 10 or more days.

Follow Steps 1 - 5 listed below.

1. Starting Surveys - Timing Inspections

Time your inspections to begin as favorable climate conditions for this pathogen begin to develop in your state. To help you do this,

Use: The first map (1) Addendum I, "Nursery Production"). Notice the country is divided into four time zones (by date range), based on when climate conditions match optimum disease etiology and are likely to express disease symptoms 50% or more of the time. Locate which zone your state lays in and use the associated date as your projected start date for your survey.

Note: determining the exact start date within these climatic parameters will depend on the knowledge and experience of local survey and inspection personnel. Due to the variation in climatic conditions, inspections may last one to three months in a given state.

Note: The chance of detection decreases as surveys move away the optimum inspection time (Host/Pathogen/Climate) window unless the number of infected plants expressing symptoms in a nursery increases.

2 Determine how many Nurseries are to be inspected by risk group

Based on your start date selected in step 1 above, use the Climate match Maps (Addendum series III) and the table below to determine, how many and where sites with nurseries need to be inspected based on risk:

If your state is wholly or in part listed in **Group I**, you must survey a minimum of **25 sites** in that state (**high risk**).

If your state is in wholly or in part listed in **Group II**, you must survey a minimum of **20 sites** in that state (**moderate risk**).

If your state is in wholly or in part listed in **Group III**, you must survey a minimum of **15** sites in that state (**low risk**).

V. The Survey Protocol (continued)

3. Determine which Nurseries are to be inspected within each risk group identified.

Based on a minimum number of nurseries to be surveyed by risk area in your state, determine how many establishments listed below should be inspected based on step 2 First priority for inspection is to those nurseries that include conditions cited under definitions 1, 2, 3, and 4.

1* Facility Type	2* Known Pathway	3* Native Hosts	4* Hosts in Inventory	TOTAL Rating	Example
1	1	1	1	4	Highest
1	1		1	3	
1		1	1	3	
1	0	0 .	1	2	
1	0	0	0	1	Lowest
	Facility	Facility Known Pathway 1 1 1 1 1 1 0	Facility Known Pathway Native Hosts 1 1 1 1 1 1 1 1 0 0	Facility Type Known Pathway Native Hosts in Inventory 1 1 1 1 1 1 1 1 1 1 1 1	Facility Type Rating 1 1 1 1 1 4 1 1 1 3 1 1 0 0 1 1 2

Definitions 1 - 4

- 1 Select a representative mix across the area / state from facility types listed below and rated above:
 - Production nurseries
 - Wholesale nurseries
 - Foliage /Christmas tree farms / plantations
 - Retail nurseries
 - Retail outlets

Nurseries which contain host material (could be any or a combination of the above)

- 2. Nurseries, which have received known host plant materials (see accompanying list of hosts) from Europe* (especially the Netherlands) and infested areas in California and Oregon. Consider those nurseries which have received known hosts from Washington State and British Columbia within the past several years as well.
- 3. Nurseries located in areas where native vegetation includes hosts of *P. ramorum* because these areas are more likely to harbor the disease.
- 4. Nurseries that carry listed host material.

NOTE! As part of this survey, to prepare for future surveys, we need States to report the number of each of the above categories of nursery that exists in their State.

Sudden Oak Death 2004 National Nursery Surveyor's Manual

V. The Survey Protocol (continued)

4. List Nurseries by location that should be inspected based on potential SOD risk.)

Table 2 is intended as a guide (example), to ensure states set up a risk matrix based on the level of risk identified for each nursery in the Step 3 by location.

Table 2	General Location	of Nurseries at r	isk ** EXAM	PLE
Location	High	Medium	Low	
1	Pierce Co.			
2		Pierce Co.		
. 3	King Co.			
4			Watcom Co.	
5	Thurston Co.			
6	Thurston Co.			
7	Pierce Co.			
8		Pierce Co.		
9		Mason Co.		
25			Grant Co.	
TOTAL	11	10	4	TOTAL

^{**} Rank each nursery in the order that it should be visited based on the level of risk (low, medium, or high) as determined in Table 1. The location description (county name) is the minimum level of site information needed in NAPIS this year for the National SOD survey. Each state may add more detail to turn this matrix into a working field document as needed. The number of sites to be surveyed will depend on the number of nurseries identified in Step 2 (remember 25, 20, or 15 sites are minimums and states may add more as time and resources permit).

5. Inspect and Sample Nursery Plants

Use the host list provided in <u>Addendum IV</u> as causal reference for identifying the host plants that should be inspected at selected nurseries. Note this list is not inclusive and other plants may be found harboring this pathogen.

Rèview an inventory list of host plants provided by the nursery, to determine which are to be inspected. <u>Visually inspect a minimum of 100 plants or at least 2% at random of each host genus present</u>.

Select a minimum of 40 samples with symptoms. If no symptoms are observed, note how many hosts were inspected and that none had exhibited symptoms. If resources and time allow it, choose another nursery, going back to step #4. If symptoms were observed, then proceed to the next step of inspecting areas adjacent to the nurseries.

Peripheral areas adjacent to Nurseries

Locate and inspect cull piles of plant materials that have been taken off site or discarded Sample if symptomatic plants are observed.

Survey native host vegetation growing along the perimeter of the nurseries. Note the presence of disease symptoms and of any other pests (e.g. gypsy moth or anthracnose) Collect specimens if possible, or make note on inspection report for future investigation. Be sure to coordinate with your State Forester or Dept. of Natural Resources which may be conducting a survey within 100 meters of the nurseries you are surveying.

Record survey and sampling results. (See survey records.)

Sudden Oak Death 2004 National Nursery Surveyor's Manual

V. Sampling Protocol

1. Collecting Nursery Samples

Minimum Sample Size

Collect at least 40 samples of symptomatic leaves and/or stems per nursery. Sample plants listed as plants Lists of Hosts and Plants Associated with *Phytophthora ramorum* in Addendum IV. *for ELISA extraction .2 to .5 grams of plant tissue is required. The number of leaves and stems sampled per plant varies depending on the density of the host plant material. (7 or 8 leaves of *Camellia* would provide sufficient material, 20-25 leaves of *Syringa* may be required.)

Inspecting plants and plant parts

When symptoms of *P. ramorum*, are first detected, look for adjacent foliar hosts with symptoms, such as rhododendron, camellia or other nursery plant common to the local area. Then inspect the leaves for the following symptoms: dead leaf tip (the end of leaf which hangs down and away from twig), yellow halo on leaf directly above the dead tip, and often a few dark brown to black spots above the yellow halo on the green leaf portion (see <u>Addendum I</u>).

Collecting Samples

As *P. ramorum* infection symptoms are detected, you are required to take samples for laboratory confirmation. Cut two or three pieces of material that contains both signs and symptoms from each plan sampled. More than one sample can be taken from each species (or variety) in a nursery as long as all nursery stock in each nursery was inspected to insure all plants had a chance to be sampled and a minimum of 40 samples are taken. See comments above not to sample asymptomatic plants in the national survey.

2. What to do when symptoms are detected

Contact your field supervisor ASAP.

Take the time first to determine and document the significance of each find. Are the symptoms characteristic of *P. ramorum* infection? If more than one plant is showing symptoms characteristic of *P. ramorum*, note the spatial pattern in the nursery.

Complete a sample form.

Note total number of symptomatic plants in your report by stock.

Take a picture of the samples before removing it from the plant if possible. Photograph the entire plant, and as well as close-ups of the symptomatic plant part. Step back and photograph the nursery block etc. to gain a perspective of where the symptomatic plant is located with respect to other plants in the nursery. A minimum of 3 photographs per symptomatic plant will be typical, unless several plants in a block are symptomatic, in which case discretion is advised.

Sanitation

Decontaminate all equipment you use to take samples before leaving a nursery. Use a spray bottle containing a dilute (5%) Clorox® solution or 70% or stronger of ethanol over all tools before leaving the site. Spray boots or shoes with solution in spray bottle before leaving each site.

Follow decontamination procedures before and after taking each sample.

Notification

Ensure that transportation and laboratory facilities have been arranged such that samples will be processed and plated within 24 -48 hours of collection. See Supervisor on where to submit samples.

Sudden Oak Death 2004 National Nursery Surveyor's Manua

V. Sampling Protocol (continued)

3. Preparing Samples

Samples should be bagged in a moisture-retaining container, such as a polyethylene bag to prevent drying.

Decontaminate hands and place sample bag in a second protective bag.

Always write out the identifying label remarks on the outside of the bag.

Keep the sample cool and out of the sun (have a foam Cooler available).

After you have double bagged the sample, fill out a pest and disease sample form and attach it to the bag (See Addendum VIA).

Labeling and Documenting Samples

After care has been exercised to secure a good sample, it is vital to protect and label the sample properly. The label should contain the complete information pertaining to the sample submitted. Use one of the black felt tipped water proof pens provided. The label must include:

- 1. Name and Number of the Nursery
- , 2. Time and Date of sampling
 - 3. Surveyor's ID (alpha-numeric characters)
 - 4. Sample ID This should be the inspection record ID plus a two character alphanumeric sample code. Example: [SOD][WA][123][35]

3 prgm code, 2-letter state code, 3-numeric site code (Nursery) and 2 alpha-numeric sample code.

	Program	State	Site No.	Sample
Example	National Survey	WA	Nursery visited	01 to ZZ
Code	SOD	WA	123	35
	Example: S	ODWA12335	(also can use letters aa t	

Do's and Don'ts of Sample Collecting Do:

Wash all debris from sampling tools as noted under sanitation.

Spray boots with bleach, brush and rinse them before leaving each nursery site. Attach labels on the outside of bags since labels inside the bag may deteriorate due

to moisture and become illegible.

Include on all labels with a permanent marker: time, date, collector's identification number, location of sample site, sample number.

Keep the samples cool (around 380~400 F) place in foam cooler.

Flag (use flagging tape) to indicate where plants sample was taken.

Get the sample to your supervisor the same day it is collected so it may be mailed as soon as possible to preserve freshness (Overnight mail).

Don't:

- Add extra moisture to the sample to keep it fresh. The extra moisture will actually speed deterioration of the sample.
- Leave samples in sunlight, allow them to dry out, or allow them to get hot.

Sudden Oak Death 2004 National Nursery Surveyor's Manual

VI. Reporting Results

Survey information you collect will be used to produce management tools for decision makers and other involved with pest management and international trade. The value of this program is vested in the quality of the information collected by you the surveyor.

To bring near real time answers to questions asked about SOD, The National Agricultural Pest Information System (NAPIS) is the official APHIS mechanism used to manage, and retrieve Phytophthora ramorum program survey information.

The flow of new survey information collected should begin with: and end after:

Surveyors

Standard Survey Record Completed

Survey Coordinators

Survey Records Collected & Reviewed for Quality Assurance

Data Entry personnel

Data of survey records are entered to NAPIS Input Buffer

DB Manager

Data Records reviewed for Quality Assurance & accepted

Time frame:

The survey records must be put into NAPIS according to the CAPS guidelines for pest survey and data submission on a bi-weekly basis as each stage of state survey and laboratory analysis of the results. New finds subject to confirmation must be reported with 48 hours.

For questions on NAPIS and data submission you may contact:

Jim Pheasant, NAPIS Hotline, User Services

CERIS - Purdue University PHONE: 765-494-9853

Internet Email: pheasant@purdue.edu

As data is submitted, a national report will be generated and posted for information on the website.

The following information collected should include the same data elements (information) found on the SOD Worksheet for the Nursery Survey (See <u>Addendum V</u>). For definitions see state coordinator or go online to: http://ceris.purdue.edu/caps

Minimum Survey Elements to be Collected			
Observation Number	Observation Date	Data Source	State-County
EPA Site Code (Crop)	Crop (Host) Life Stage	Crop Situation	Latitude/Longitude
EPA Pest Code	Pest Status	Survey Method	Quantification
Descriptor Units	Total Units Check	Observation-Duration	Diagnostic Lab
Confirmation Method	Lab Process Date	NOTES field	

Observation Record: It is important that state cooperators follow the following record format to maintain record integrity within the national program. A ten digit code defined as follows:

	Program	State	Site No.	Sample
description	National Survey	WA	Nursery visited	01 to ZZ
Code	SOD	WA	123	35
	Example: SODW	A12335 (als	o can use letters aa to zz)	

Addendum IV Plant Genera of Interest Regarding Phytophthora ramorum APHIS List of Hosts and Plants Associated with Phytophthora ramorum Last revised 29 April 2004

Host Plant for Phytophthora ramorum

(These are regulated in whole or in part - see http://www.aphis.usda.gov/ppg/ispm/sod)

Host Code	Scientific Name (29)	Common Name
35405	Acer macrophyllum	Bigleaf maple
35796	Aesculus californica	California buckeye
38046	Arbutus menziesii	Madrone
37049	Arctostaphylos manzanita	Manzanita
34043	Camellia japonica	Japanese camellia
37003	Camellia sasanqua	Sasanqua camellia
34229	Hamamelis virginiana	Witch hazel
38053	Heteromeles arbutifolia	Toyon
38036	Lithocarpus densiflorus	Tanoak
34396	Lonicera hispidula	California honeysuckle
37115	Pieris formosa	Himalaya pieris
•	Pieris formosa x japonica	Pieris `Forest Flame'
34096	Pleris floribunda x japonica	Pieris 'Brouwer's Beauty'
34078	Pleris japonica	Japanese pieris
30039	Pseudotsuga menziesii var. menziesii	Douglas-fir
38041	Quercus agrifolia	Coast live oak
38051	Quercus chrysolepis	Canyon live oak
38042	Quercus kelloggii	California black oak
38043	Quercus parvula v. shrevei	Shreve oak
34311	Rhamnus californica	California coffeeberry
34118	Rhododendron spp	Rhododendron
37116	Rosa gymnocarpa	Wood Rose
30062	Sequoia sempervirens	Coast redwood
38052	Trientalis latifolia	Western starflower
35386	Umbellularia californica	California bav laurel, pepperwood,
34376	Vaccinium ovatum	Evergreen huckleberry
	Viburnum x bodnantense	Bodnant viburnum
34190	Viburnum plicatum var. tomentosum	Doublefile viburnum
34285	Viburnum tinus	Laurustinus

Rationale for lists:

Host Plant for Phytophthora ramorum:

Host plants are those adapted from other regulated lists or were added upon completion, documentation and review of traditional Koch's postulates. Some are regulated in part (such as redwood and Douglas fir), others are regulated in their entirety (such as tanoak and western star flower). Details on regulated articles can be found via links to "Phytophthora ramorum 7 CFR 301.92" and "Recent Modifications to Phytophthora ramorum Regulations" at:

http://www.aphis.usda.gov/ppg/ispm/sod

Plant associated with Phytophtora ramorum:

Associated plants are those found naturally infected from which *P. ramorum* has been cultured and/or detected using PCR (Polymerase Chain Reaction). For each of these, traditional Koch's postulates have not yet been completed or documented and reviewed.

This list is constantly being updated. The most current version is posted at: http://www.aphis.usda.gov/ppg/ispm/sod

Scope of Work for *Phytophthora ramoum*In Non-Infested Counties
March 1-2004-February 28, 2005
FY 2003/2004 and 2004/2005

Appendix B

. Confirmed Nursery Protocol

Nursery Protocol for Nurseries with Plants Infected with *Phytophthora* ramorum (Sudden Oak Death)

1. BACKGROUND AND OBJECTIVES:

In February 2002, USDA Animal and Plant Health Inspection Service (APHIS) issued a federal domestic regulation for interstate movement of *Phytophthora ramorum* (7 CFR 301.92-11). The complete text and other information may be found at USDA, APHIS' web site: www.aphis.usda.gov/ppq/ispm/sod/

In 2003, P. ramorum was detected in nurseries in British Columbia, Washington, Oregon and in California's Central Valley. These incidents catalyzed the need for a standard protocol for use by state and federal regulators to respond to new finds of P. ramorum in nurseries outside of the regulated area To ensure that there is consistency in dealing with this disease, this Action Plan and Protocol describes the official activities performed by USDA, APHIS staff in cooperation with state agriculture regulatory officials in nurseries to respond to new infections by P. ramorum.

The goal of the action plan is to ensure that any infestations of this serious pathogen are consistently and effectively addressed, mitigated, and eradicated. Nursery co-operation is essential. Early detection and reporting of potential *P.ramorum* infections are critical to ensure that spread is contained. The strategies employed in this action plan are consistent with those of the European Union and of other areas where eradications are being carried out with measures that ensure rapid suppression of infection, and which prevent the spread of the pathogen.

P. ramorum infestations in nurseries may be introduced via three critical pathways.

The movement of infected plant material from one nursery to another;

The natural environmental movement of spores from one nursery or infected wild plants to infect plants in a nursery,

The transmission of the disease from non-plant pathways to plant material (e.g. the introduction of infested soil, water, equipment, etc.)

2. DEFINITIONS:

r

Regulated Area: Regulated counties and areas as identified in regulations

found at http://www.aphis.usda.gov/ppg/ispm/sod

Suspected infected plants: Plants with visible symptoms of P. ramorum infection;

asymptomic plants that are a part of an infested varietal block or derived from an infested varietal block; and/or plants that have tested postitive using PCR, but have not been confirmed

positive for P. ramorum via culturing.

Infected plants: Plants with or without soil verified as being infected with P.

ramorum based on isolation of the causal organism and assayed by: 1) comparative morphological determination

and 2) Polymerase Chain Reaction (PCR).

Plant material at risk: Minimally host and associated plants for P. ramorum as

identified at http://www.aphis.usda.gov/ppq/ispm/sod (see Appendix G). Other plants are undoubtedly at risk, but their susceptibility to *P. ramorum* has not been demonstrated.

Production block (lot) A group of plants identified as being of a unique cultivar

genus or species divided from other similar plants by a distinct, visible spatial separation that is no less than 2

meters.

Facility: Site(s) where plants are grown, propagated, or held for sale.

Occurrence: Presence in an area of a pest, officially reported to be

indigenous or introduced, and not officially reported to have

been eradicated. (FAO, 1990), FAO-CEPM, 1994.

Free from: Of a consignment, field or place of production, without pests (or

a specific pest) in numbers or quantities that can be detected by the application of phytosanitary procedures. (FAO, 1990), FAO-

CEPM, 1994.

Outbreak: An isolated pest population recently detected and expected to

survive for the immediate future. FAO-CEPM, 1994.

Quarantine area: An area within which a quarantine pest occurs and which is

being officially controlled. (NAPPO, 1985) FAO-WG, 1995

Buffer Zone A 10 meter radius, as measured outward from terminus of the 2

meter radius boundary that encircles the infested block.

3. TRIGGER EVENTS for REGULATORY ACTION:

Suspect positives will trigger State action and Federal notification. A suspect is either:

1. The receipt of plant material from a confirmed, infested nursery. See trace forwards, under Investigation below (Section 5).

OR

2. The detection of a plant in a nursery that the State or Federal laboratory finds positive (PCR or culture) for P. ramorum.

A federally confirmed suspect will trigger federal/state action. Pending the completion of a delimiting survey, (see Regulatory below, Section 6):

1. Shipment(s) will be placed on hold.

2 All host genera and associated host plant genera in the nursery will be placed on hold.

Identification-Definition of Official Confirmation

- 1. Authority and responsibilities.
 - States with quarantines for P. ramorum have specific responsibilities and specific authorities, as authorized by their laws and regulations, thus specific actions within and around the nursery are expected to be conducted by the State personnel with Federal support.
 - States without quarantines for *P. ramorum* will have those actions that must take place within and around the nursery be conducted under Federal authorities, in coordination with State personnel.
- 2. Samples for confirmation should be submitted to United States Department of Agriculture, National Plant Germplasm Laboratory (NPGPL) in Beltsville, MD (see Appendix F, Dr. Laurene Levy).
- 3. For those states with established quarantines for *P. ramorum*, state confirmation will be sufficient for state regulatory action. State regulatory action would be supported by APHIS, PPQ.
- 4. Protocols for confirmation Two (2) techniques are required for positive confirmation of *P. ramorum*. See Appendix D.
- 5. Standard References. These would consist of plant pathology references available online, or in texts that provide definitive information for the diagnosis of *P. ramorum*.

4. NOTIFICATION:

- Communicate suspect finds as soon as one of the following has occurred:
 - 1. a positive PCR find
 - 2. a culture that matches the morphology for, P. ramorum (i.e. isolation of P. ramorum)
 - 3. A discussion with a nursery that positive stock may have been shipped to a neighboring state.
- Immediately provide notification to the owner. Notification details are provided under Regulatory Action, Section 6.

Immediately notify the State Plant Health Director (SPHD) and the State Regulatory Official (SPRO) of the State in which the nursery is in.

APIIIS, PPQ Region Office and National Headquarters Office shall be notified See Section F, Resources.

Notify state plant regulatory officials (SPHD's and SPRO's) and facilities that are impacted by the trace backs and trace forwards. See Investigation, Section 5.

Notification of laboratory results: laboratories need to notify the submitter, the SPHD, and the SPRO. Either the SPRO (if State authority is used) or the SPHD (if Federal authority is used) shall notify the owner of the nursery.

NAPPO Notification: Notification shall be provided to NAPPO and PlM by Headquarters and CPHST, when an area is placed under restrictions and when it is released as free-from.

Public Notification: The SPRO and SPHD will use state channels, including public affairs offices to make any public announcements. The SPHD will insure that the Legislative and Public Affairs is aware of the pending release, via the Region Office and National Headquarters Office.

Notifications provided to other States: Infested nurseries will provide notification of any shipments of hosts/associated hosts moving out of state, to the receiving State Plant Health Director (SPHD), and/or State Plant Regulatory Official (SPRO) by fax, email, or telephone. Details of any host/associated host shipments will be provided for a one year period following the last *P. ramorum* positive plant find.

5. INVESTIGATION

Trace backs. Determine the origin of all infected plants through trace backs. After traces are completed, link to host plants, related plants, and other hosts and associated plants. Check origin of other host plants, associated plant species and neighboring plants. Trace back the plants to point of origin (propagator). Depending on the situation it may be necessary to go back further (especially foreign sources, stock that has moved around to many different nurseries). The need is to determine the site of production. As a general guideline, trace backs should extend back a minimum of one calendar year from time of initial detection.

Trace forwards. Initiate trace forward investigations. Shipments made prior to the discovery of P. ramorum shall be identified and state SPRO's, SPHD's and receivers shall be notified of all shipments made within the prior 12 months from the first positive detection of P. ramorum at the nursery. Plants identified through trace forwards that have been moved into a landscape environ should be inspected and tested during optimal conditions for growth and development of P. ramorum symptoms.

At the nursery, the soil, water, and growing regime should be completely documented. The loading dock, trucks, trays should be observed and the propagative, sanitation and disposal methods noted.

Soil. Determine the content, origin (constituency), storage and handling of soil or growth media used in the facility. Determine if infected plant material may have contaminated soil or growth media used at the nursery.

Water. Determine the source of irrigation water and where drainage water flows. Note the type of irrigation system(s) in use, areas of standing water and any safeguards against water back flow in the irrigation system, and any water treatment practices.

Cull piles. Record the location of any cull piles that may be contaminated with infected plant material or associated soil. Check any cull piles for symptomatic plants, and plant material

Equipment. Determine if equipment used at the facility is shared with other facilities or field areas.

• Fungicides. Determine if fungicides are used on the plant materials at the nursery. If fungicides were used, then the date, material, amount and application rate should be recorded. Determine if any other type of treatments (soil amendments, fertilizers) are applied to the plants, soil or growth media.

6. REGULATORY ACTION

Holds and Quarantine Action

At a nursery where an infected plant is detected all host plant genera and associated host plant genera will be held until delimitation within and outside of the nursery are complete. This hold will include growth media and "any other product or article that an inspector determines to present a risk of spreading *Phytophthora ramorum*, if an inspector notifies the person in possession of the product or article that it is a restricted article", 7CFR part 301.92 (b) (2) within the infested facility.

For no tification use PPQ form 523, Emergency Action Notification, as specified under the Plant Protection Act of 2000 and Plant Quarantine Regulations. The Required treatments and/or basic sanitary and precautionary measures (e.g. biocontainment of suspected infected material, etc.) should be included in the PPQ form 523. If the State initiated action, then the appropriate State notification would be used.

• Stop Sales notices should be placed on the nursery by the appropriate State Regulatory Official.

Appropriate safeguarding measures must be initiated to prevent movement of the infected plant material within or from the nursery.

Survey, Delimitation, and Control within the Nursery

Perimeter survey. Survey plants of all host/associated host genera located within 100-meters of the infected nursery for symptoms of disease caused by *P. ramorum*. Sample all symptomatic plants and submit to the appropriate State laboratory or other APHIS approved laboratory for diagnosis.

Sent By

Confirmed Nursery Protocol April 7, 2004 --- Version 4.2

Delimiting Survey. Inspect all hosts and associated host plant genera in the nursery. Sample those plants with typical and/or atypical symptoms. See sampling protocol (Appendix E) for sampling strategy, which is especially useful for large nurseries. All host and associated hosts beyond the 10 meter buffer, if determined through inspection and testing to be 'free from', will be released from regulatory control. In the 10 meter buffer, sample all symptomatic plants or 40 asymptomatic plants plus 2% of all plants above 100 plants. Submit samples to an officially approved laboratory for diagnostics.

- Where an infected plant(s) is found, all host and associated host plants within a contiguous block will be destroyed. The destruction block includes the infested host block and all contiguous hosts and associated hosts until you reach a 2 meter break. The two meter break occurs when there is either 2 meters with no plants or no hosts or associated host plants. Ensure destruction is carried out according to one of the methods detailed in Appendix A.
- All plants (see official regulatory list) within 10 meters of the removed plants will be held for 90 days, measured at a time when plant parts which express disease symptoms are present and environmental conditions are conducive to pathogen detection, and will be subject to two visual inspections. Samples must be taken and tested during this 90 day quarantine. Samples will be taken from symptomatic plants when available and asymptomatic (i.e., symptom-free) plants only if no symptomatic plants are present. Soil, media, and water (if applicable) should also be tested twice during the 90 day quarantine period. See Appendix D for recommended baiting system(s) for soil and water.

Symptomatic plants may not be removed from the nursery, from any holding area in the nursery, or moved within the nursery until the nursery is officially declared free-from *P. ramorum* and removed from quarantine status.

During the 90 day quarantine period, growers will discontinue applications of fungicides for *Phytophthora* control within the 10 meter buffer area.

See Appendix B for basic sanitary measures that must be implemented immediately in all facilities containing a *P. ramorum* positive plant. Growers should utilize nursery best management practices (see Appendix C). Tools and other implements should only be used in the buffer area or must be disinfected prior to removal from the buffer (see Appendix B). All plant parts removed from plants within the 10 meter buffer area must be destroyed by an approved method (see Appendix A).

CONDITIONS FOR RELEASE:

Nursery plants that have been placed under regulatory control may be released from regulatory action by USDA, APHIS or designated authority after the 90 day quarantine if the following can be demonstrated:

- There are no additional detections of P. ramorum in nursery stock.
- Water and potting media have also tested negative for P. ramorum.

If water is infested, treatment is imposed (see Appendix A) the 90 day quarantine period restarts. Potting media and water must be retested within the new 90 day quarantine period. If water is found to be positive, then any portion of the nursery that has been irrigated with *P. ramorum* infested water is placed on hold. The goal is to achieve an area-free – from status.

Criteria for release of nursery and for phytosanitary certification of plants on hold will include two distinct diagnostic procedures as outlined below.

- Culture isolation and PCR based confirmation
- PARP isolation + morphology confirmation
- ELISA and plating (culture isolation)

Post eradication monitoring. Nurseries that have been infested will continue to be monitored for the following two spring seasons as part of the national survey. These nurseries are not under any quarantine or regulatory action, unless additional outbreaks are detected.

APPENDIX A TREATMENTS

Incineration (burning to ash): the infected plants, associated growth media, associated containers (i.e. pots and trays), all leaf debris in and around the area where plants were stored may be disposed of by incineration at a facility or other location (e.g. on site) approved by USDA and permitted within provincial and municipal statutes. Off nursery movement must be properly safeguarded and every effort to prevent plant debris or soil from being dislodged from the plants prior to incineration should be taken. Burning may be through open burning or in an incinerator.

Deep burial: the infected plants, associated growth media, associated containers (i.e. pots and trays), all leaf debris in and around the area where plants were stored must be placed in double plastic bags of 4 mil thickness or greater and buried to a depth of no less than two meters. The material must be buried at a USDA approved site, onsite, or municipal landfill, which is expected to remain undisturbed. Every effort to prevent plant debris or soil from being dislodged from the plants should be taken.

Composting:

• As per Federal Regulations, upon publication in the Federal Register.

Treatments for Contaminated Water.

- Chlorine levels of 2mg/liter or greater has been correlated with the control of *Phytophthora* Spp. in re-circulated irrigation systems. (Hong et al. 2003)
- Chlorox (sodium hypochlorite) is labeled (EPA Reg. No 5813-50) for treatment of water (~50 ppm available chlorine) for controlling the spread of *Phytophthora* lateralis via water used for dust abatement, fire suppression and equipment cleaning

The active ingredient level must be measured at the sprinkler head, otherwise the treatment is not effective.

APPENDIX B BIOSECURITY AND DISINFECTION METHODS

If it is practicable, tools such as knives, pruners, water breakers, water wands and other implements used in the buffer area should only be used in the buffer area. If tools and other implements must be moved from the buffer area, then regular disinfection using an appropriate disinfectant for the control of *P. ramorum* (such as 1/9 solution of chlorine bleach or 70% or better solution of ethanol) is recommended prior to removal from the buffer area.

A disinfectant foot bath should be placed and used by personnel entering and exiting the buffer area "hot zone" at the infested facility, where the movement of soil or plant debris on footwear is likely. The foot bath must be filled with fresh disinfectant on a daily basis. Use of disposable shoe covers may be used in lieu of a footbath, if disposed of immediately upon exit from the buffer. The disposable shoe covers must bagged and incinerated.

Everyone entering and leaving the facility must scrape off loose pieces of soil. Those working with, or in contact with suspected infected material (including plants), must wash hands using soap, or disinfectant immediately after completion of task.

Host material (including leaf litter) must not be placed in compost piles or be removed from the facility as trash or in debris removal. Host material should be collected and incinerated or double bagged and deep buried in a site approved by USDA, APHIS or delegated regulatory authority.

The tires (or other parts in contact with the soil) of vehicles must be cleaned of loose soil before leaving the infested facility.

Do not visit other commercial operations in potentially contaminated work clothing and footwear. Where it is necessary that visitors enter the facility, the facility should ensure that every precaution is taken to prevent the movement of infected plants, contaminated soil or debris with the visitor.

Clorox (sodium hypochlorite) is labeled (EPA Reg. No 5813-50) for treatment of water (~50 ppm available chlorine) measured at the sprinkler head) for controlling the spread of *Phytophthora lateralis* (Port Orford Cedar Root Disease) for water used for dust abatement, fire suppression and equipment cleaning.

Treatments reported *(Erwin and Ribeiro 1996) as effective against other *Phytophthora* species include copper naphthenate for the treatment of wood surfaces, sodium hypochlorite, quaternary ammonium and hydrogen peroxide

Rationale for lists:

Plant species regulated for Phytophthora ramorum:

Regulated plants are those adapted from other regulated lists or were added upon completion, documentation and review of traditional Koch's postulates. Some are regulated in part (such as redwood and Douglas fir), others are regulated in their entirety (such as tanoak and western star flower). Details on regulated articles can be found via links to "Phytophthora ramorum 7 CFR 301.92" and "Recent Modifications to Phytophthora ramorum Regulations" at:

www.aphis.usda.gov/ppq/ispm/sod

Plant species associated with P. ramorum, not currently regulated:

Associated plants are those found naturally infected from which P. ramorum has been cultured and/or detected using PCR (Polymerase Chain Reaction). For each of these, traditional Koch's postulates have not yet been completed or documented and reviewed. Though not regulated and not requiring certification under P. ramorum regulations, these plants will be inspected in museries and Christmas tree plantations and, if symptoms observed, held from sale pending testing.

This list is constantly being updated. The most current version is posted at www.aphis.usda.gov/ppq/ispm/sod



STATE OF CALIFORNIA
DEPARTMENT OF FOOD AND
AGRICULTURE
1220 N Street, Room A-372
Sacramento, CA 95814

PEST EXCLUSION ADVISORY

NO. <u>15-2004</u>

DATE:

April 13, 2004

TO:

All County Agricultural Commissioners

FROM:

Plant Health and Pest Prevention Services

SUBJECT:

Regulatory Actions Required at Trace-Forward Locations

This is an update to Pest Exclusion Advisory 12-2004 regarding the actions to take at **trace-forward locations** (nurseries that received *Phytophthora ramorum* host material from Monrovia Nursery in Azusa, CA and Specialty Plants in San Marcos, CA). **For all trace-forward locations**, inspectors should follow instructions 1-6 listed in PEA 12-2004, including the segregation, inspection, and sampling of plants from Monrovia Nursery, and the release of all plants that test negative for *P. ramorum*.

If any plants from Monrovia Nursery in Azusa test positive for *P. ramorum*, the actions to take at **all nurseries**' except those in the 12 infested counties that do not ship outside of the 12 infested counties, are as follows:

- 1. All hosts and associated hosts at the nursery must be placed on hold.
- Inspectors should follow the basic sanitary measures contained in Appendix B of the <u>Protocol for Nurseries with Plants Infected with P. ramorum</u>, January 12, 2004, Fourth Draft (hereafter referred to as the Protocol) when visiting the nurseries.
- 3. The nursery should follow the best management practices contained in Appendix C of the Protocol This is not a required regulatory action and is up to the discretion of the nursery owner or manager.
- 4. Destroy all plants that test positive for *P. ramorum*, plus all host and associated host plants within a contiguous block of the positive plants (see attached diagram). The destruction block includes the infested host block and all contiguous hosts and associated hosts until a two-meter break is reached. The two-meter break occurs when there is either two meters with no plants, or no hosts or associated host plants.
- 5. All host and associated hosts within 10 meters of the destruction block must be held for 90 days. During the 90-day period, two visual inspections must occur, and samples must be taken of symptomatic plants. If no symptomatic plants are detected, samples must be taken from 40 asymptomatic plants, plus 2% of all plants if there are more than 100 total plants. Also, samples of the water and growing media must be taken. During the 90-day period, the nursery must discontinue the use of fungicides for *Phytophthora sp.* control on the plants on hold. These plants can be released from hold if the inspections and tests are negative and if the water and potting media test negative. If the water tests positive, any portion of the nursery that has been irrigated with that water must be placed on hold.

Pest Exclusion Advisory 15-2004 Page 2 April 13, 2004

- 6. Conduct a delimitation survey of all hosts and associated hosts outside of 10 meters. If there are less than 100 host plants at the nursery, inspect 100% of the plants. If there are more than 100 host plants, inspect 100 plants plus 2% of the total. If symptomatic plants are found, sample each symptomatic plant. If fewer than 40 symptomatic plants are found, sample additional asymptomatic plants so that the total number of samples is 40. These plants can be released from hold if the inspections and tests are negative.
- 7. Conduct a perimeter survey (minimum of 100 meters) of hosts and associated hosts around the nursery. Samples must be taken of **symptomatic plants** only.
- 8. If a nursery (in one of the 12 infested counties or in one of the 46 non-infested counties) has entered into a compliance agreement to ship host and associated host material interstate (or intrastate from one of the 12 infested counties), the compliance agreement must be temporarily suspended until after the delimitation survey has been completed with negative results.
- * Item 7 of PEA 12-2004 indicated that if plants from Monrovia Nursery in Azusa, CA test positive for *Phytophthora ramorum*, the regulatory action to take will depend on whether or not the nursery ships hosts of *P. ramorum* out-of-state. This is no longer true. For all nurseries in California, except those in the 12 infested counties that do not ship outside of the 12 infested counties, the instructions listed above must be followed.

If you have any questions regarding this advisory, please contact Courtney Albrecht at (916) 653-1440, or by e-mail at calbrecht@cdfa.ca.gov.

Attachment

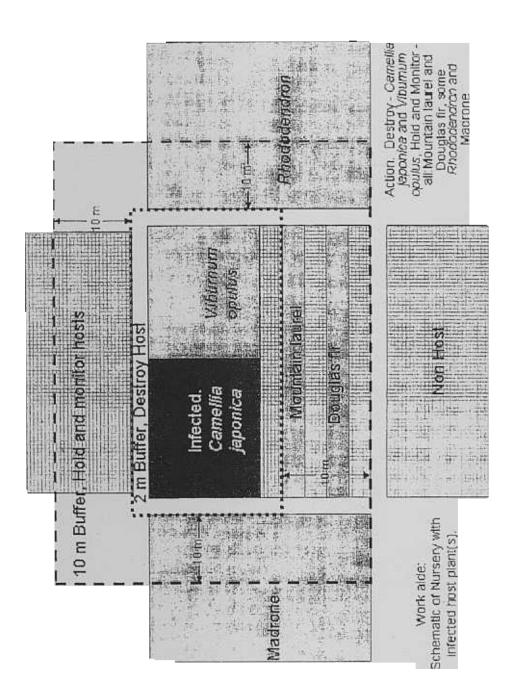


Diagram of contiguous host blocks of infected plants that need to be destroyed Destroy Camellia japonica and Vibumum opulus.



PEST EXCLUSION ADVISORY

NO. <u>18-2004</u>

May 5, 2004

7°O:

All County Agricultural Commissioners

Plant Health and Pest Prevention Services

SUBJECT:

Regulatory Action Required at Trace Forward Locations

This is to notify all County Agricultural Commissioners that Trace Forward information is required for all wholesale nurseries that test positive for *Phytophthora ramorum*, the causal pathogen of Sudden Oak Death (SOD).

TRACE FORWARD LISTS

The Trace Forward lists must include all destinations to where SOD host and associated host plants were shipped in the twelve months prior to and including the day samples were collected.

Trace Forward lists must include the following information:

- Trace Forward shipping nursery name
- > SOD host and associated host plants shipped (genus, species, variety)
- > Amounts and container size of each SOD host/associated host plant shipped
- Receiving nursery name and complete physical address including County

Send all Trace Forward lists to Vince Arellano via fax at (916) 654-0986 or via e-mail at vrarellano@cdfa.ca.gov

TRACE FORWARD HOLD NOTICES

All Trace Forward locations must be contacted and Hold Notices issued for all SOD host/associated host plants received and still at location. Make a list of nurseries that no longer have any Trace Forward host/associated host plants.

Hold Notices must be legible and include the following information:

- > The County issuing the Hold Notice
- > Name of the nursery as it appears on their Nursery License
- Complete physical address
- Complete inventory of plants placed on hold, which includes genus, species, variety and container sizes

Fax all Trace Forward Hold Notices and list of nurseries that no longer have Trace Forward SOD host/associated host plants to Vince Arellano at (916) 654-0986.

Any questions concerning this advisory may be directed to Vince Arellano at (916) 653-1440, or by e-mail at vrarellano@cdfa.ca.gov

Prepared by: Vince Arellano

Scope of Work for *Phytophthora ramoum*In Non-Infested Counties
March 1-2004-February 28, 2005
FY 2003/2004 and 2004/2005

Appendix E

- 1. Amended Order Restricting Movement Of Nursery Stock From California Nurseries April 22, 2004
- 2. Draft Interim Federal Rule
 - a. Phytosanitary Advisory 3-2004
 - b. Phytosanitary Advisory 4-2004



AMENDED ORDER RESTRICTING MOVEMENT OF NURSERY STOCK FROM CALIFORNIA NURSERIES APRIL 22, 2004

United States Department of Agriculture

Animal and Plant Health Inspection Service

Marketing and Regulatory Programs

Washington, DC 20250

This order replaces ORDER RESTRICTING MOVEMENT OF NURSERY STOCK FROM CALIFORNIA NURSERIES, dated April 9, 2004.

The purpose and goal of this Order is to prevent the spread of *Phytophthora ramorum* (sudden oak death or SOD), through regulatory authority provided for in Sections 412 and 414 of the Plant Protection Act, (7 U.S.C. 7712, 7714). The Administrator of the Animal and Plant Health Inspection Service (APHIS) considers it necessary, in order to prevent the dissemination of *P. ramorum*, to establish restrictions on the interstate movement of nursery stock that has been identified as a host (Attachment I) of *P. ramorum*, as well as certain associated articles (nursery stock of unconfirmed, but potential host species, see Attachment II) from commercial nurseries in non-quarantined counties in California. To fulfill the goal of *P. ramorum* containment, this Order addresses needs for inspection and certification of all host nursery stock and associated articles originating in California.

Restrictions on California Nurseries Located Outside Quarantined Areas

This order will address immediately the discovery of *P. ramorum* in commercial nurseries in California that are outside the quarantined area. The 10 counties currently under quarantine are: Alameda, Marin, Mendocino, Monterey, Napa, San Mateo, Santa Clara, Santa Cruz, Solano, and Sonoma. This order adds Contra Costa and Humboldt to the list of quarantined areas. Given that nurseries outside the quarantined area are not covered by the current regulations, we are implementing new restrictions on the interstate movement of host nursery stock and associated articles from all commercial nurseries in California that are outside the quarantined area. This action is necessary on an emergency basis to prevent the potential spread of *P. ramorum* to non-infested areas of the United States outside California.

The recent detections of *P. ramorum* in the non-quarantined area of California are limited to commercially produced plants inside nurseries. In the quarantined counties in California, *P. ramorum* is known to be established in the natural environment. The disease has not been detected in the environment outside the quarantined area, where dry climate and weather conditions are not conducive to the disease. However, irrigation and other cultural practices in nurseries located outside the quarantined area may create microclimates that are hospitable to *P. ramorum*. Therefore, we are regulating the interstate movement of host nursery stock and associated articles from commercial nurseries in non-quarantined areas in California. We are not regulating the interstate movement of any other articles from the non-quarantined portion of California because positive finds in the non-quarantined area have been limited to nursery stock. We are not expanding the quarantined area beyond the 12 county area



Safeguarding American Agriculture APHIS is an agency of USDA's Marketing and Regulatory Programs

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Sent By

because P. ramorum has not been found in the natural environment outside the currently quarantined area.

Effective immediately, the host nursery stock and associated articles listed in Attachments I and II of this order may not be moved interstate from any commercial nursery in non-quarantined areas of California until the nursery has been inspected and we determine there is no evidence of *P. ramorum* infestation according to the following process:

I. Inspection and Restrictions on Movement of Plants

Nurseries that ship host nursery stock or associated articles listed in Attachments I and II of this order interstate must be inspected by an APHIS, State, or County inspector for *P. ramorum*. The nursery must be inspected, sampled, and tested. Until testing is completed and the nursery is found free of evidence of *P. ramorum* as described below under part III, the following plants must be withheld from interstate shipment: (1) All host nursery stock and associated articles; (2) all plants within same genus as any host or associated article; and (3) any plants located within 10 meters of a host or associated article.

II. Sampling.

A minimum of 40 samples must be tested per nursery location. One sample may contain more than one leaf, but no more than one sample per plant. Samples will be taken from symptomatic plants unless no symptomatic plants are present. In that case, asymptomatic plants will be sampled. Sampling shall be biased to hosts, associated articles, and nearby plants. The inspector should take nursery fungicide programs into consideration and conduct inspections at times when the best expression of symptoms are anticipated.

III. Testing procedures and protocols.

Samples must be analyzed using a methodology approved by APHIS at a laboratory approved by APHIS.

ELISA prescreening of plant samples may be used to determine the presence of *Phytophthora*.

- If all samples from a single nursery are found to be negative through ELISA prescreening, no further testing is required. The nursery may be considered free of evidence of *P. ramorum*, and the nursery is eligible to issue certificates for the interstate movement of plants provided that it is operating under a compliance agreement with APHIS in accordance with 7 CFR 301.92-6.
- If ELISA prescreening reveals the presence of *Phytophthora* in any plants, plants must continue to be held as described above in part I, and each sample

5AM;

that returns positive ELISA results must be tested using the test protocol described below.

If ELISA prescreening is not performed, or if results of ELISA prescreening are positive for Phytophthora, plant samples must be analyzed using either the APHISapproved nested PCR or culture test. Samples will be considered positive for P. ramorum based on positive results of a nested PCR test or positive results of a culture test. Positive nested PCR tests do not require confirmatory culture tests, nor do positive culture tests require confirmatory nested PCR tests. Note, however, that if culture tests return negative results, a nested PCR test must be conducted, as described below. No culture test is required if a nested PCR test returns negative results.

Nested PCR Test

- If the results of nested PCR tests are negative for all samples in a nursery, no further testing is required. The nursery may be considered free of evidence of P. ramorum, and the nursery is eligible to issue certificates for the interstate movement of plants provided that it is operating under a compliance agreement with APHIS in accordance with 7 CFR 301.92-6.
- If any samples tested using the nested PCR protocol return positive results for P. ramorum, the nursery from which they originate is prohibited from moving (1) All host nursery stock and associated articles, (2) all plants within same genus as any listed host or associated article, (3) any plants located within 10 meters of a host or associated article, and (4) any genera of other plants found infected until the infestation is delimited and isolated, re-inspected and tested, and an inspector determines that the plants intended for shipment interstate show no evidence of P. ramorum infestation. At that time, the nursery will be eligible to ship plants interstate provided that it is operating under a compliance agreement with APHIS in accordance with 7 CFR 301.92-6.

Culture Test

If the results of culture tests are negative for any samples taken from a single nursery, plants in the nursery must continue to be held as described above in part I, and each plant sample that returns negative culture results must be tested again using the nested PCR test, as described above.

If any culture tests return positive results for P. ramorum, the nursery from which they originate is prohibited from moving (1) All host nursery stock and associated articles, (2) all plants within same genus as any listed host or associated article, (3) any plants located within 10 meters of a host or associated article, and (4) any genera of other plants found infected until the infestation is delimited and isolated, re-inspected and tested, and an inspector determines that the plants intended for shipment interstate show no evidence of P. ramorum infestation. At that time, the nursery will be eligible to ship

plants interstate provided that it is operating under a compliance agreement with APHIS in accordance with 7 CFR 301.92-6.

These testing protocols are described in detail at: www.aphis.usda.gov/ppq/ispm/sod/survey.html. Additional test methods may be approved by APHIS in the future.

IV. Certification of Compliance

All host nursery stock and associated articles shipped interstate originating in California must be accompanied by appropriate Federal certification issued under a compliance agreement.

Restrictions on the Movement of Associated Articles from Quarantined Areas

In this order, we are restricting the interstate movement of associated articles (see Attachment II). Under this order, associated articles are subject to the same restrictions that currently apply to regulated articles of nursery stock that are being moved interstate from quarantined areas. Those restrictions include requirements that nurseries where host nursery stock and associated articles are grown be inspected and tested for the presence of *P. ramorum* in advance of the interstate movement of regulated nursery stock. The requirements can be found in § 301.92-11(a).

An interim rule will be issued and published in the <u>Federal Register</u> setting forth the requirements of the order.

/S/ Richard L. Dunkle	
Signature of USDA Official	-
Deputy Administrator, PPQ	
Title	
April 22, 2004	
Date	_

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Attachment I

The complete list of confirmed hosts, including those already listed in the regulations, follows. Those marked with an asterisk are the ones added by this order.

Arrowwood (a.k.a. Bodnant viburnum) (Viburnum x bodnantense)

Big leaf maple (Acer macrophyllum)

California bay laurel (a.k.a. pepperwood, Oregon myrtle)

(Umbellularia californica)

California black oak (Quercus kelloggii)

California buckeye (Aesculus californica)

California coffeeberry (Rhamnus californica)

California honeysuckle (Lonicera hispidula)

Canyon live oak (Quercus chrysolepis)*

Coast live oak (Quercus agrifolia)

Coast redwood (Sequoia sempervirens) (except wood products,

including lumber, logs, and firewood)*

Doublefile viburnum (Viburnum plicatum var. tomentosum)*

Douglas fir (Pseudotsuga menziesii var. menziesii) (except

wood products, including lumber, logs, and firewood)*

Evergreen huckleberry (Vaccinium ovatum) (except fruit)

Himalaya pieris (Pieris formosa)*

Japanese camellia (Camellia japonica)*

Japanese pieris (Pieris japonica)*

Laurustinus (Viburnum tinus)*

Madrone (Arbutus menziesii)

Manzanita (Arctostaphylos manzanita)

Pieris "Brouwer's Beauty" (Pieris floribunda x japonica)*

Pieris "Forest Flame" (Pieris formosa x japonica)*

Rhododendron (Rhododendron spp., including azalea)

Sasanqua camellia (Camellia sasanqua

Shreve's oak (Quercus parvula var. shrevei)

Tanoak (Lithocarpus densiflorus)

Toyon (Heteromeles arbutifolia)

Western starflower (Trientalis latifolia)*

Witch hazel (Hamamelis virginiana) (except wood products)*

Wood rose (Rosa gymnocarpa)*

Attachment II

Associated articles are nursery stock of the following species: Twenty-nine additional plant species have been identified as associated with P. ramorum because results of culture or Polymerase Chain Reaction (PCR) tests returned positive results for the fungus. For each of these plant species, traditional Koch's postulates have not yet been completed or documented and reviewed, but given the positive results of culture or PCR tests, we believe it is necessary to restrict the interstate movement of these hosts until the results of Koch's postulates are complete. When the results of Koch's postulates are complete, we will address the issue by listing positive articles as regulated and restricted articles, and by removing from regulation plant species that return negative results.

Burkwood viburnum (Viburnum x burkwoodii)

California hazelnut (Corylus cornuta)

Camellia (Camellia reticulata and Camellia x williamsii)

Cascara (Rhamnus purshiana)

Chinese pieris (Pieris formosa var. forrestii)

Chinese pieris (Pieris formosa var. forrestii x Pieris japonica)

David viburnum (Viburnum davidii)

Drooping leucothoe (Leucothoe fontanesiana)

European beech (Fagus sylvatica)

European cranberry bush viburnum (Viburnum opulus)

European turkey oak (Quercus cerris)

European yew (Taxus baccata)

Fragrant viburnum (Viburnum farreri (=V. fragrans))

Grand fir (Abies grandis)

Holm oak (Quercus ilex)

Horse chestnut (Aesculus hippocastanum)

Lilac (Syringa yulgaris)

Lingonberry (Vaccinium vitis-idaea)

Mountain laurel (Kalmia latifolia)

Northern red oak (Quercus rubra)

Poison oak (Toxicodendron diversiloba)

Prague viburnum (Viburnum x pragense)

Salmonberry (Rubus spectabilis)

Southern red oak (Quercus falcata)

Strawberry tree (Arbutus unedo)

Sweet chestnut (Castanea sativa)

Viburnum eskimo (Viburnum x carlcephalum x V. utile)

Victorian box (Pittosporum undulatum)

Wayfaringtree viburnum (Viburnum lantana)



STATE OF CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE 1220 N Street, Room A-372 Sacramento, CA 95814

PHYTOSANITARY ADVISORY

NO. 3-2004

March 26, 2004

TO:

All County Agricultural Commissioners

FROM:

Plant Health and Pest Prevention Services

SUBJECT:

Statewide Federal Quarantine for Sudden Oak Death

Effective Monday, March 29, 2004, the Federal Domestic Quarantine for Phytophthora ramorum (CFR 301.92) will be revised to regulate the entire State of California. This action is due to the detection of P. ramorum in two nurseries outside of the currently regulated area, and to prevent the interstate movement of infected plant material. The revised federal quarantine will distinguish between the infested and noninfested areas of the state, and the only regulated articles in the non-infested area will be nursery stock of hosts and associated hosts for P. ramorum (see list of regulated articles in Exhibit A2 attached).

The regulated, infested area of the state will be the 12 counties currently regulated by the state regulation (CCR 3700). Certification for interstate shipments of nursery stock and other regulated articles from the infested area will not be changed in the revised Federal Domestic Quarantine. Certification for intrastate movement of regulated articles is still required.

The regulated, non-infested area of the state will be the other 46 counties in the state where P. ramorum has not been detected in the environment. Certification for interstate shipments of regulated plants from the regulated, non-infested area will be based on a visual inspection for symptoms of Sudden Oak Death (SOD).

Inspection protocol for nurseries in non-infested, regulated area:

- If symptoms of SOD are not detected, the nursery or shipment will be certified for interstate movement.
- If symptoms of SOD are detected, a Nursery Stock Hold Notice will be issued and samples will be taken and submitted to the CDFA Plant Pest Diagnostics Laboratory.
 - b If laboratory results are negative, the nursery or shipment will be certified for interstate movement.
 - o If laboratory results are positive, eradication of the infection must be completed following the . USDA Federal Infected Nursery Protocol.

Method of certification:

Nurseries in the regulated, non-infested area may enter into a compliance agreement with their County Agricultural Commissioner to be authorized to self-certify interstate shipments of regulated plants. The following documents are attached to this advisory:

- Compliance Agreement for Phytophthora ramorum Quarantine Project (used statewide)
- Exhibit A2, Interstate Regulated Nursery Stock
- Exhibit X, Nursery (for use in infested area)
- Federal Certificate Tracking Log (must be maintained by the nursery under compliance)

Nurseries that enter into the compliance agreement above will be allowed to ship regulated plants interstate that originate from other nurseries under certain conditions. The regulated plants must be held and inspected prior to release, or they must be accompanied by certification to meet the state regulation for SOD, if applicable.

All counties should use the following, nine-digit numbering system for the compliance agreements

First two digits:

County number

Next Seven digits: Nursery License Number (must include the location code)

Attachments

COOPERATIVE PHYTOPHTHORA RAMORUM QUARANTINE PROJECT COMPLIANCE AGREEMENT

County Agricultural Commissioner / CDFA / USDA

[Pursuant to California Food and Agricultural C Regulations Section 3151, Plant Protection Act, Sec 301.92]	ode Sections 5705, California Code of at 431 (I), Public Law 106-224, and 7 CFR
County Agric Street Addr City Addre	
Contact – (Agricultural	Commissioner)
Compliance Agreement Number:	
Establishment Name:	
Manager Name:	
Mailing Address:	
Street City	County Zip
Phone: ()	E-Mail: @
Fax: ()	Latitude:
Cross Street:	Longitude:
Parties: The California Department of Food and Agricu Department of Agriculture (USDA), and the Agricultural Commissioner, cooperating as the Quarantine Project	County
Project Officer:	
Business/Establishment	
Establishment Name: (subsequently referred t	o as "Establishment")
BACKGROUND: The causal pathogen, Phytophthora ramoru presents a real and ongoing threat to the a	m, of "Sudden Oak Death (SOD)" gricultural industry, environment and

economy of the State of California. Movement of regulated articles and commodities is a recognized channel for the spread of SOD from established areas to new locations. The Phytophthora Ramorum Quarantine Project is a

movement of SOD from regulated areas where the disease may be established to new locations. Your establishment is located within a regulated area or is receiving regulated articles from a regulated area.

AGREEMENT:

A. The Phytophthora Ramorum Quarantine Project, hereafter referred to as the Project, will permit your establishment to self-execute the regulatory requirements attached as exhibits checked below, inclusive and incorporated into this agreement by reference as if fully set out. The exhibits checked below are binding (check all that apply):

\square	Exhibit A2 – Interstate Regulated Nursery Stock
	Exhibit X – Nursery (Uninfested County)

- **B**. In exchange for the Project's promise contained in sub-paragraph "A" above, the Establishment agrees to abide by the following rules and regulations:
 - 1. Handle, process, and/or move regulated articles in accordance with the regulatory requirements;
 - 2. Follow the Project's instructions regarding the use of all permits and certificates;
 - 3. Maintain and make such records as the Project requires, accessible for inspection upon reasonable notice by the Project Officer. These records shall be maintained for a period of the later of 2 years or the resolution of any outstanding claims.
- C. This agreement becomes effective on signing and shall remain in effect until canceled by either party on 30 days notice to the other at the address of either appearing above. However, the Project may accelerate the notice to immediate for cause, including but not limited to the Establishment's abandonment of the procedures outlined in the attached Exhibit(s).
- **D.** Establishment assumes liability, if any, arising from the manner in which Establishment sells, handles or distributes any regulated host material.

NOTICE: Any signatory or employee of any signatory who violates the terms of this Compliance Agreement may be subject to Civil Penalties pursuant to California Food and Agricultural Code Section 5705, and 7 Code of Federal Regulations 301.92, Plant Protection Act, Sec. 431 (I), Public Law 106-224.

Signed in the County of	in the State of California on//2002
Establishment by: (print name)	Phytophthora Ramorum Quarantine Project by: (print name)
Manager/Owner (signature):	Project Officer (signature):
•	

Sep-8-04 8:22AM;

Exhibit A2: Interstate Regulated Nursery Stock

For the most current information see:

Federal regulation: 7 CFR 301.92 (www.aphis.usda.gov/ppq/ispm/sod)

Regulated Articles: The following listed plant species are regulated in whole or in part.

Scientific Name (28)	Common Name
Acer macrophyllum	Bigleaf maple
Aesculus californica	California buckeye
Arbutus menziesii	Madrone
Arctostaphylos manzanita	Manzanita
Camellia japonica	Japanese camellia
Camellia sasanqua	Sasanqua camellia
Hamamelis virginiana	Witch hazel
Heteromeles arbutifolia	Toyon
Lithocarpus densiflorus	Tanoak
Lonicera hispidula	California honeysuckle
Pieris formosa	Himalaya pieris
Pieris fo rm osa x japonica	Pieris 'Forest Flame'
Pieris floribunda x japonica	Pieris 'Brouwer's Beauty'
Pieris japonica	Japanese pieris
Pseudotsuga menziesii var. menziesii	Douglas-fir
Quercus agrifolia	Coast live oak
Quercus chrysolepis	Canyon live oak
Quercus kelloggii	California black oak
Quercus parvula v. shrevei	Shreve oak
Rhamnus californica	California coffeeberry
Rhododendron spp	Rhododendron, including Azalea
Sequoia sempervirens	Coast redwood
Trientalis latifolia	Western starflower
Umbellularia californica	California bay laurel, pepperwood, Oregon myrtle
Vaccinium ovatum	Evergreen huckleberry
Viburnum x bodnantense	Bodnant viburnum
Viburnum plicatum var. tomentosum	Doublefile viburnum
Viburnum tinus	Laurustinus

Scientific Name (31)	Common Name, Date & Source of Report
Abies grandis	Grand fir - June 03 (1)
Aesculus hippocastanum	Horse-chestnut - Dec 03 (3)
Arbutus unedo	Strawberry tree - Dec 02 (7)
Camellia reticulate	Oct 03 (3)
Camellia x williamsii	Oct 03 (3)
Castanea sativa	Sweet Chestnut Feb 04 (3)
Corylus cornuta	California hazeInut - Dec 02 (5)
Fagus sylvatica	European beech - Dec 03 (3)
Kalmia latifolia	Mountain laurel – Fall 02 (3)
Leucothoe fontanesiana	Drooping leucothoe Oct 03 (3)
Pieris formosa var. forrestii	Chinese pieris Oct 03 (3)
Pieris formosa var. forrestii x Pieris japonica	Oct 03 (3)
Pittosporum undulatum	Victorian box - Dec 02 (6)
Quercus sativa	European turkey oak Feb 04 (3)
Quercus fulcate	Southern red oak – Nov 03 (3)
Quercus ilex	Holm oak - Dec 03 (3)
Quercus rubra	Northern red oak - Nov 03 (8)
Rhamnus purshiana	Cascara - Dec o2 (4)
Rosa gymnocarpa	Wood rose – Mar 04 (6)
Rubus spectabilis	Salmonberry - Dec 02 (4)
Syringa vulgaris	Lilac - 2003 (3) updated Oct 03
Thxus baccata	European yew (3)
Toxicodendron diversiloba	Poison oak - Dec 02 (4)
Vaccinium vitis-idaea	Lingonberry - Poland, 2002 (reported by 3)
Viburnum davidii	David viburnum Oct 03 (3)
Viburnum farreri (=V. fragrans)	Fragrant viburnum Oct 03 (3)
Viburnum lantana	Wayfaringtree viburnum Oct 03 (3)
Viburnum opulus	European cranberrybush viburnum Oct 03 (3)
Viburnum x burkwoodii	Burkwood viburnum Oct 03 (3)
Viburnum x carlcephalum x V. utile	Oct 03 (3)
Viburnum x pragense	Prague viburnum Oct 03 (3)

¹ California Department of Food and Agriculture
² Oregon Department of Agriculture
³ Department for Environment, Food, and Rural Affairs, UK
⁴ Everett Hanson, Oregon State University
⁵ David Rizzo, University of California – Davis
⁶ Mateo Garbelotto, University of California - Berkeley

Eduardo Moralejo, Instituto Mediterráneo de Estudios Avanzados, IMEDEA (CSIC-UIB) - Balearic Islands, Spain
 Plant Protection Service, Wageningen, Netherlands

EXHIBIT X- NURSERY (UNINFESTED COUNTY)

Provisions for the Interstate Movement of Listed Plants of Nursery Stock:

Establishment agrees to the following:

Inspection of Nursery

Establishment shall allow the Project to perform inspections and sampling on listed plants (see Exhibit A2).

2. Shipping Period

Establishment may move listed plants interstate from the date the above inspection is completed, including laboratory analysis of symptomatic plant material, until directed otherwise by the Project.

3. Receipt and Reshipping

Establishment may receive listed plants originating from other sources, and move them interstate under the following conditions:

- A) The listed plants originated outside the regulated area and are accompanied by a receipt or bill of lading, or
- B) The listed plants originated within the regulated area and are accompanied by appropriate* quarantine certification, or
- C. The listed plants originated within the regulated area and are not accompanied by appropriate quarantine certification and:
 - The Establishment notifies the Project within one working day of receipt of the shipment, and
 - 2) The Establishment safeguards, segregates, and holds the listed plants off-sale until they are inspected and released by the Project

4. Restriction on Sources of Regulated Articles

Establishment may only receive listed plants from other sources under the following conditions

- A) The listed plants originated outside the regulated area and are accompanied by a receipt or bill of lading, or
- B) The listed plants originated within the regulated area and are accompanied by appropriate* quarantine certification, or
- C) The uncertified listed plants originated within the regulated area, and
 - The Establishment notifies the Project within one working day of receipt of the shipment, and

EXHIBIT X-NURSERY (UNINFESTED COUNTY)

2) The Establishment safeguards, segregates, and holds the listed plants off-sale until they are inspected and released by the Project.

5. Maintain Identity

Establishment shall maintain the identity of all listed plants that are in compliance with Provisions 1. Establishment shall maintain the identity of all listed plants that originated from other sources that are in compliance with provisions 3A or 3B.

Quarantine Certification

The Establishment shall ensure that appropriate quarantine certification accompanies each shipment of listed plants moved out of the regulated area. Listed plants may only be moved out of the regulated area when in accordance with the above provisions and 7 CFR 301.92.

Establishment may provide appropriate quarantine certification for listed plants moved within the regulated area when the listed plants have been inspected in accordance with Provision 1.

7. Records

Establishment shall maintain production records or records of receipt for all listed plants moved out of the regulated area. Establishment shall maintain records, as directed by the Project, on each shipment of listed plants moved out of the regulated area. Establishment shall provide such records to the Project Officer once every 30 days, or as specified by the Project Officer. Establishment shall allow the Project perform periodic inspections to verify compliance with this Provision.

8. Infected Nursery Stock

If any plant within a nursery is found to be infected with Phytophthora ramorum, Establishment shall not move any listed plant, out of the regulated area until such time as the Project can determine that the nursery is free of Phytophthora ramorum.

9. Notice

Establishment shall provide at least 24 hours notice to the Project Officer when requesting an inspection.

*A California Certificate of Quarantine Compliance or a USDA Form 527 or 540 (certificate or stamp) is an appropriate quarantine certificate.

A California Nursery Stock Certificate is not an appropriate quarantine certificate

E-16 Revision date: March 26, 2004

Cooperative Sudden Oak Death (SOD) Program SOD PPQ 527Certificate (Rubber Stamp or Sticker) Issuance Tracking Log

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STATE OF CALIFORNIA
DEPARTMENT OF FOOD AND
AGRICULTURE
1220 N Street, Room A-372
Sacramento, CA 95814

PHYTOSANITARY ADVISORY

NO. <u>4-2004</u>

DATE

March 30, 2004

TO:

All County Agricultural Commissioners

FROM:

Plant Health and Pest Prevention Services

SUBJECT:

Statewide Federal Quarantine for Sudden Oak Death

This is an update to Phytosanitary Advisory 03-2004. Phytosanitary Advisory 03-2004 notified all County Agricultural Commissioners that the Federal Domestic Quarantine for *Phytophthora ramorum* (CFR 301.92) was revised to regulate *P. ramorum* host and associated host plants from the entire State of California (outside of the 12 counties already regulated), and provided a compliance agreement to facilitate the certification of regulated articles. The compliance agreement and other supporting documents have been revised and are attached to this advisory.

The following documents are revised and are attached to this advisory:

Compliance Agreement for Phytophthora ramorum Quarantine Project (used statewide). Exhibit Y, Authorization for Certification. This Exhibit is to be signed by the issuing agricultural inspector and a nursery representative. It provides authorization for each nursery to reproduce and use a rubber stamp to certify each interstate shipment of regulated articles.

Important Note: For each growing location, a separate compliance agreement and unique compliance agreement number must be used. Therefore, a different rubber stamp with a unique compliance agreement number must be made for each growing location.

PPQ Form 527 Issuance Tracking Log This Log is to be used by each nursery under compliance to record the use of the rubber stamp. The log is to remain on the nursery premises and be made available to agricultural inspectors upon request. If a nursery has already been given pre-numbered PPQ Form 527 stickers, then the nursery must use the PPQ Form 527 Issuance Tracking Log provided in Physanitary Advisory 3-2004.

The following documents have not been changed, but are also provided in this advisory

Exhibit X Nursery (for use in non-infested area)
Exhibit A2 List of Interstate Regulated Nursery Slock

Important Note:

The revised Federal Domestic Quarantine 301.92 regulates nursery stock of *P. ramorum* host and associated host plants from the 46 counties in California outside of the 12 that were already regulated. All the documents included in this advisory are to be used only in the newly regulated 46 counties. For the 12, previously regulated counties (Alameda, Contra Costa, Humboldt, Marin, Mendocino, Monterey, San Francisco, San Mateo, Santa Clara, Santa Cruz, Sonoma, Solano), the <u>regulated articles</u> <u>shipping restrictions</u>, and <u>method of certification</u> have not changed and the attached documents should not be used.

Attachments

COOPERATIVE PHYTOPHTHORA RAMORUM QUARANTINE PROJECT **COMPLIANCE AGREEMENT**

County Agricultu	ıral Commissioner / CDFA / USDA
[Pursuant to California Food and Agricultural C Regulations Section 3151, Plant Protection Act, Sec 301.92]	code Sections 5705, California Code of ct 431 (I), Public Law 106-224, and 7 CFR
County Agric Street Add City Addre Contact – (Agricultural	ess
Compliance Agreement Number:	
Establishment Name:	
Manager Name:	
Mailing Address:	
Śtreet City	County Zip
Phone: ()	E-Mail: @
Fax: ()	
Thos. Bros:	Latitude:
Cross Street:	Longitude:
Parties: The California Department of Food and Agricu Department of Agriculture (USDA), and the Agricultural Commissioner, cooperating as the Quarantine Project	County
Project Officer:	
Business/Establishment	
Establishment Name: (subsequently referred t	o as "Establishment"

BACKGROUND:

The causal pathogen, Phytophthora ramorum, of "Sudden Oak Death (SOD)" presents a real and ongoing threat to the agricultural industry, environment and economy of the State of California. Movement of regulated articles and commodities is a recognized channel for the spread of SOD from established areas to new locations. The Phytophthora Ramorum Quarantine Project is a cooperative effort between public entities that are responsible for mitigating the

movement of SOD from regulated areas where the disease may be established to new locations.

AGREEMENT:

A. The Phytophthora Ramorum Quarantine Project, hereafter referred to as the Project, will permit your establishment to execute the regulatory requirements outlined in Code of Federal Regulations (CFR) 301.92. Requirements are outlined and attached as exhibits, inclusive and incorporated into this agreement by reference as if fully set out. The exhibits below are attached and binding:

Exhibit A2 - Interstate Regulated Nursery Stock

Exhibit X - Nursery (Non-infested County)

Exhibit Y-Authorization for Certification

- **B.** In exchange for the Project's promise contained in sub-paragraph "A" above, the Establishment agrees to abide by the following rules and regulations:
 - 1 Handle, process, and/or move regulated articles in accordance with the regulatory requirements outlined in CFR 301.92;
 - 2. Follow the instructions outlined in Exhibit Y regarding the use of all certificates;
 - 3. Maintain and make shipping and receiving records of regulated articles accessible for inspection upon reasonable notice by the Project Officer. These records shall be maintained for a period of the later of 2 years or the resolution of any outstanding claims.
- C. This agreement becomes effective on signing and shall remain in effect until canceled by either party on 30 days notice to the other at the address of either appearing above. However, the Project may accelerate the notice to immediate for cause, including but not limited to the Establishment's abandonment of the procedures outlined in the attached Exhibit(s).
- D. Establishment assumes liability, if any, arising from the manner in which Establishment sells, handles or distributes any regulated host material.

NOTICE: Any signatory or employee of any signatory who violates the terms of this Compliance Agreement may be subject to Civil Penalties pursuant to California Food and Agricultural Code Section 5705, and 7

Code of Federal Regulations 301.92, Plant Protection Act, Sec. 431 (I), Public Law 106-224.

Signed in the County of	in the State of California on//200_
Establishment by: (print name)	Phytophthora Ramorum Quarantine Project by: (print name)
Manager/Owner (signature):	Project Officer (signature):

Sep-8-04 8:26AM;

EXHIBIT Y- Authorization for Certification (NON-INFESTED COUNTY) Authorization for Certification

Business/Establishment Name

Establishment agrees to the following:

- 1 Reproduce the Federal certificate following dimensions in example below and using exact language in the example.
- 2. Use Federal certificate to certify interstate shipments of regulated plant material shipped from growing grounds named in this compliance agreement.
- 3 Use Federal certificate to certify regulated plant material that has been inspected and found free of symptoms of Sudden Oak Death by agricultural officials.
- 4 Maintain record of all interstate shipments certified with Federal certificate and make such records available to agricultural officials upon request.
- 5. Delegate to one person only the authority to reproduce Federal certificate and use to certify interstate shipments of regulated articles.

USDA - APHIS - PPQ 4700 RIVER ROAD RIVERDALE, MD 20737 CERTIFIED UNDER 7CFR301.92 FEDERAL COOPERATIVE DOMESTIC PLANT QUARANTINE

CA #: XX-XXXXXXXXX

Stamp Description:

Approx. Size: 2"x4" Font: Arial Black Font Size: 11

Compliance Agreement Numbering System:

First two digits:

County Code (i.e.: 30 - Orange County)

Next five digits:

Nursery License Number. This should start with letters A, B, C, or D

Last three digits:

Nursery location code (Each growing ground has a unique location code already assigned

in the Nursery License Number.)

EXHIBIT Y- Authorization for Certification (NON-INFESTED COUNTY)

Authorization for Certification

Page 2

By signing below, Establishment agrees to follow a Authorization for Certification.	all instructions contained in Exhibit Y,
Signature of Establishment Representative	
	Date _.
Signature of County Representative	
	Date

Revision date: March 26, 2004

Scope of Work for *Phytophthora ramoum*In Non-Infested Counties
March 1-2004-February 28, 2005
FY 2003/2004 and 2004/2005

Appendix F

1. Pest Exclusion Advisory 13-2004



STATE OF CALIFORNIA
DEPARTMENT OF FOOD AND
AGRICULTURE
1220 N Street, Room A-372
Sacramento, CA 95814

PEST EXCLUSION ADVISORY

NO. <u>13-2004</u>

DATE:

April 2, 2004

TO:

All County Agricultural Commissioners

FROM:

Plant Health and Pest Prevention Services

SUBJECT:

Sudden Oak Death Compliance Agreement Data Collection Website

This is in regards to data collection requirements associated with the issuance of compliance agreements (CA)—to nurseries shipping Sudden Oak Death (SOD)—host plants interstate from the regulated/noninfested counties. The CA data must be entered into the following database as soon as possible. The data will be used to create a web-based list of nurseries under compliance. The web site is located at http://phpps.cdfa.ca.gov. Access to the website requires a username and password. To obtain a user name and password select the <sign up> link on the left side of the log in page (see Figure 1).

Enter your username/password and select <Login> on the page that looks similar to Figure 1

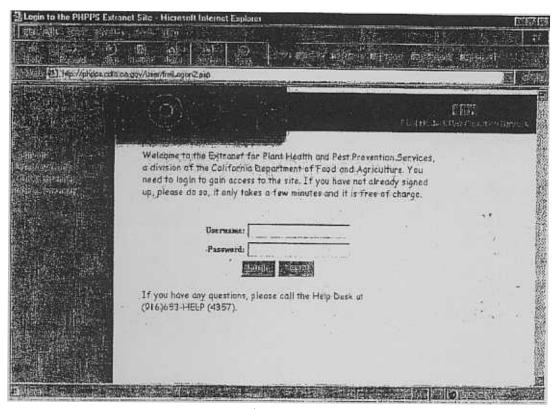


Figure 1 - Login Screen.

Pest Exclusion Advisory 13-2004 Page 2 April 2, 2004

Across the top of the 'Welcome' page, click <Databases>. On the left side of the 'Databases' page, click <SOD CA Data Entry>. This will bring you to a page similar to Figure 2 below.



Figure 2 - SOD Compliance agreement data input nursery search

In the nursery name box, enter the name of the nursery or type four or five letters you are sure are in the name of the nursery and click the <Search> button. For example, if you type 'ines' and click search, the list in Figure 3 would be displayed. From this list, click the selection point to the left of the nursery you are issuing the CA. Please make sure the addresses match as several nurseries have several different locations and each location should be listed. If the nursery name or location you are looking for does not appear of the list, please call the nursery program at (916) 654-0435 extension 3617 or 3609.

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Figure 3 - List to select nursery

Prepared by: Casey Estep

Pest Exclusion Advisory 13-2004 Page 3 April 2, 2004

After selecting a nursery from the list, Figure 4 will be displayed. This is the input screen. In the example, we selected Hines Nursery Inc. on Jeffrey Rd in Irvine. On this screen, you can enter the fax and e-mail address of the nursery.

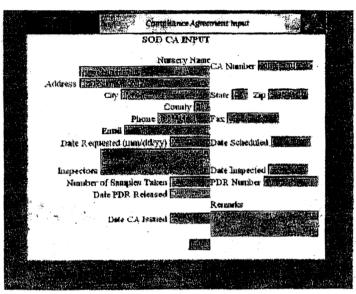


Figure 4 - CA information input screen

The other fields for input are:

1. Date Requested

a. If the nursery called to ask for an inspection or recommended inspection on a particular date, enter here if applicable.

2. Date Scheduled

a. Enter the date the inspection was scheduled to be done if applicable.

3. Thispectors

a. Enter the name(s) of those inspecting the nursery.

4.7 Date Inspected

a. Enter the date the nursery was actually inspected. If more than one date, enter the last date of the inspection.

5. Samples taken

a. Enter the number of different samples collected.

6. PDR Number

a. Enter the PDR number (there should be only one).

b. For each nursery location, one PDR should be used for all samples collected at that location. Please be sure to select one sample/many host for the configuration and list all hosts with varieties for Camellias or Rhododendrons on the PDR. The Activity should be 41 and the Situation should be 22. Select SOD as the program.

7 Date Released

a. Enter the date the PDR is released by the lab.

8. Date CA Issued

a. Enter the date the CA was issued. This is extremely important. The computer will not recognize a nursery as having a CA unless a date is in this field.

9. Remarks

a. Enter any remarks or special situations with this nursery.

b. Please enter the nursery contact you worked with in this field in the format 'contact:

Pest Exclusion Advisory 13-2004 Page 4 April 2, 2004

Click <Enter> to submit this record. Currently there are no edit screens or reports available on-line Because of this, it is important that the information entered is complete and accurate.

After clicking <Enter>, you will be returned to Figure 2. From here, you can either enter the name for another nursery to input or click <Create a PDR> to enter PDR information for submittal to the lab.

If you have any questions regarding this advisory, please contact Casey Estep at (916) 653-1440, or by e-mail at cestep@cdfa.ca.gov.

Scope of Work for *Phytophthora ramoum*In Non-Infested Counties
March 1-2004 – February 28, 2005
FY 2003/2004 and 2004/2005

Appendix G

1. USDA/APHIS/PPQ Monthly Report

SUDDEN OAK DEATH STATEWIDE EMERGENCY RESPONSE MONTHLY REPORT

		Manufact of	Florida Is
	SATE PARTIES	Ambumpe	क्षासम्बद्धाः ()
Detection Survey	Inspection, Submission of Samples, Regulatory Activity (FY 2003/2004 only)		
		国建筑	Special section
Eradication	Implementation of Confirmed Nursery Protocol (wholesale/production nurseries)		
Liadication	Implementation of Positive Retail Nursery Protocol (P.E. Advisory 19-2004)		
		The state of the s	
race Forward/Trace Back Survey	Inspection, Submission of Samples, Regulatory Activity (hold notices, etc.)		
	。 100 VENUTE		ALTERNATION POTER AND
* **	Inspection, Submission of Samples, Regulatory Activity (hold notices, etc.)		
	Issuance of Compliance Agreement for Emergency Order (March, 2004)	1 845	
Quarantine Enforcement	Issuance of Compliance Agreement for Emergency Order (April 22, 2004)		
	Data Entry		
	Ongoing compliance monitoring		
		A STATE OF THE PARTY.	
- 14 max	Communication (Public Outreach, Conference calls)		
Other	Training.		
	Administrative Support including reporting)		OFFICE OF THE PARTY OF THE PART
			the same
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Vehicle Usage		TOTAL MILES	

Scope of Work for Phytophthora ramoum In Non-Infested Counties March 1-2004-February 28, 2005 FY 2003/2004 and 2004/2005

Appendix H

1. USDA/APHIS PPQ Tracking Log

Cooperative Sudden Oak Death (SOD) Program SOD PPQ 527Certificate (Rubber Stamp or Sticker) Issuance Tracking Log

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Agreement No. <u>03-07/77</u> Page 1 of <u>1</u>

EXHIBIT B

BUDGET DETAIL AND PAYMENT PROVISIONS

1. Invoicing and Payment

- A. For services satisfactorily rendered, and upon receipt and approval of the invoices, the State agrees to compensate the Contractor for actual expenditures incurred in accordance with the rates specified herein, which is attached hereto and made a part of this Agreement.
- B. Invoices shall include the Agreement Number and shall be submitted in triplicate not more frequently than monthly in arrears. Invoices shall be submitted to the program and addressed to:

Carol DeBernardi
PHPPS/Pest Exclusion Branch
1220 N Street, Rm. A-372
Sacramento, CA 95814 Phone: (916) 654-0312

2. Budget Contingency Clause

- A. It is mutually agreed that if the Budget Act of the current year and/or any subsequent years covered under this Agreement does not appropriate sufficient funds for the program, this Agreement shall be of no further force and effect. In this event, the State shall have no liability to pay any funds whatsoever to Contractor or to furnish any other considerations under this Agreement and Contractor shall not be obligated to perform any provisions of this Agreement.
- B. If funding for any fiscal year is reduced or deleted by the Budget Act for purposes of this program, the State shall have the option to either cancel this Agreement with no liability occurring to the State, or offer an agreement amendment to Contractor to reflect the reduced amount.

8:40AM;

Wörkplan for Sudden Oak Death Statewide Emergency Response in Non-Infested Counties

FY 2003/2004

From March 1, 2004 through June 30, 2004

County

Date: 21-Jun-04 Cost Per Hour:

\$43.19

(including overhead expenses not to exceed 25%)

Activity	Number of Facilities Requiring Activity	Estimated Visits/Year/Facility	Estimated Hours/Visit	Total Hours	Estimate Cc
Detection Survey					
Inspection, Submission of Samples, Regulatory Activity (hold notices, etc.)	0		Name of the Contract of the Co	0	
Eradication					
Implementation of Confirmed Nursery Protocol (wholesale/production nurseries)	5	26	6.2	806	\$
Implementation of Positive Retail Nursery Protocol (P.E. Advisory 19-2004)	0			0	·
Trace Forward/Trace Back Survey					
Inspection, Submission of Samples, Regulatory Activity (hold notices, etc.)	58	2	7.25	841) ::::::::::::::::::::::::::::::::::::
Quarantine Enforcement					
Inspection, Submission of Samples, Regulatory Activity (hold notices, etc.)	8	10	7.5	600	\$
Issuance of Compliance Agreement for Emergency Order (March, 2004)	8	1	1	. 8	
Issuance of Compliance Agreement for Emergency Order (April 22, 2004)	3	1	3.68	11.04	
Data Entry	11	4	2.5	27.5	•
Monitoring	. 11	1	2.5	27.5	- Commission of the Commission
	1.414.024				
Other					
Communication (Public Outreach, Conference calls)				0	
Training	2	1	14	28	_
Administrative Support (Quarterly reporting)	1	1	2	2	
Supplies (gloves, sampling bags, etc.)					
Secretaria de la composición del composición de la composición dela composición de la composición de la composición de la composición dela composición de la composición de la composición dela composición de la		KERLONGS (BELSELEN MES)	Control of the contro	Subtotal:	\$1
Vehicle Usage					
Cost per Mile (\$0.34/per mile)					
Mileage per year (all vehicles) 12775		one -			
Total Vehicle Cost per Year \$4,344 (cost per mile x mileag			Total V	ehicle Cost	
				Total Cost:	\$1

Sent By: L.A. Cnty Agric Comm/Wts & Meas; 626 350 3243; Sep-8-04 8:44AM; Page 1/16
To: WEIGHTS & MEAS At: 15628610278
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Scope of Work for *Phytophthora ramoum*In Non-Infested Counties
March 1-2004-February 28, 2005
FY 2003/2004 and 2004/2005

Appendix F

1. Pest Exclusion Advisory 13-2004

Workplan for Sudden Oak Death Statewide Emergency Response in Non-Infested Counties FY 2003/2004

From March 1, 2004 through June 30, 2004

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if

Date: 21-Jun-04

\$43.19

Cost Per Hour:

(including overhead expenses not to exceed 25%)

Activity	Number of Facilities Requiring Activity	Estimated Visits/Year/Facility	Estimated Hours/Visit	Total Hours	Estimated Annual Cost
Detection Survey					
Inspection, Submission of Samples, Regulatory Activity (hold notices, etc.)	0			0	\$0.00
Fradication					
Implementation of Confirmed Nursery Protocol (wholesale/production nurseries)	5	26	6.2	806	\$34,811.14 ²
Implementation of Positive Retail Nursery Protocol (P.E. Advisory 19-2004)	0			0	\$0.00
Trace Forward/Trace Back Survey					
Inspection, Submission of Samples, Regulatory Activity (hold notices, etc.)	58	2	7.25	841	\$36,322.79
Quarantine Enforcement					
Inspection, Submission of Samples, Regulatory Activity (hold notices, etc.)		10	7.5	600	\$25,914.00
issuance of Compliance Agreement for Emergency Order (March, 2004)	8	1	1	8	\$345.52
Issuance of Compliance Agreement for Emergency Order (April 22, 2004)	3	1	3.68	11.04	\$476.82
Data Entry	11	1	2.5	27.5	\$1,187.73
Monitoring	11.	1	2.5	27.5	\$1,187.73
Other	CONTRACTOR OF STREET				
Communication (Public Outreach, Conference calls)					\$0.00
Training	2	-	14	28	\$1,209.32
Administrative Support (Quarterly reporting)		1	2	2	\$86.38
Supplies (gloves, sampling bags, etc.)					\$329.37
				2581.0	
		and the state of t	contaction water of Dispersion street	Subtotal:	\$101,870.80
Vehicle Usage					
Cost per Mile (\$0.34/per mile) Mileage per year (all vehicles)					
Total Vehicle Cost per Year \$4.344 (cost per mile x mileage			THE CANADA SECTION AND ADDRESS.	Committee in the later in the l	\$4,343.50
CONTRACTOR OF THE PROPERTY OF		·		Total (\$106,214.30

Workplan for Sudden Oak Death Statewide Emergency Response in Non-Infested Counties

From July 1, 2004 through February 28, 2005 FY 2004/2005

Total Vehicle	Mileage per y	Cost per Mile	Vehicle Usage		Supplies (glo	Administrativ	Training	Communicat	Other	Monitoring	Data Entry	issuance of (Inspection, S	Quarantine Enforcement	maperoon, o	inconsting of	Trace Forward/I	Implementation	Implementat nurseries)	Eradication	Inspection, S	Detection Survey	A A	tach tach Cost Per Hour.	ment t & County	No.
Total Vehicle Cost per Year	Mileage per year (all vehicles)	Cost per Mile (50.34/per mile)	+		Supplies (gloves, sampling bags, etc.)	Administrative Support (Quarterly reporting)		Communication (Public Outreach, Conference calls)				Compliance Agreement for Er	ubmission of Samples, Regu	rcement	Submission of Samples, Regu	inhunication of Convelor Busy	Trace Forward/Trace Back Survey	on of Positive Retail Nursery	Implementation of Confirmed Nursery Protocol (wholesale/production nurseries)		Inspection, Submission of Samples, Regulatory Activity (hold notices,	у	Activity	\$43.19	Los Angeles 21-Jun-04	
\$8,670 (cost per mile x mileag	25500 年 250 年 200 200					9)	•	ence calls)				Issuance of Compliance Agreement for Emergency Order (April 22, 2004)	Inspection, Submission of Samples, Regulatory Activity (hold notices, etc.)		inspection, administration administration and administration administration and administration administra	A		Implementation of Positive Retail Nursery Protocol (P.E. Advisory 19-2004)	otocol (wholesale/production	经过进行营销标准次是运营基础	ulatory Activity (hold notices, etc.)			(including overhead expenses not to exceed 25%)		
						1	o			20	20	20	20		495	PHILIPPING CONTRACTOR STATES OF THE PRINCIPLE OF T		01	16		O O		Number of Facilities Requiring Activity	es not to exceed 25%)		
	100mm 100m					36	-	0		3	2	2	N			Spirit in the second se		25	26		0		Estimated Visits/Year/Facility			
Total Ve	1000円の円を乗り					1.5	2.5	0			2	u	5			A STATE OF THE PERSONS ASSESSED.		2.5	8		0		Estimated Hours/Visit	Revised - 07-14-04		
otal Vehicle Cost	STATE OF THE PARTY			Subtotal:		54	15	0		120	80	120	200		990	UOU.		625	3328		0		Total Hours			
\$8,670 00	一直の本権を正式の対象			\$242,427,08	\$3,500.00	\$2,332.26	\$647,85	\$0.00		\$5,182.80	\$3,455.20	\$5,182.80	\$8,638.00		\$42,750.1	CAS 759 1		\$26,993.75	\$143,736.32		\$0.00		Estimated Annual Cost			

Sent By

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Agreement No. <u>//3 077</u>7 Page 1 of 3

EXHIBIT C (Standard Agreement)

GENERAL TERMS AND CONDITIONS, GTC-304

- 1. <u>APPROVAL</u>: This Agreement is of no force or effect until signed by both parties and approved by the Department of General Services, if required. Contractor may not commence performance until such approval has been obtained.
- 2. <u>AMENDMENT</u>: No amendment or variation of the terms of this Agreement shall be valid unless made in writing, signed by the parties and approved as required. No oral understanding or Agreement not incorporated in the Agreement is binding on any of the parties.
- 3. <u>ASSIGNMENT</u>: This Agreement is not assignable by the Contractor, either in whole or in part, without the consent of the State in the form of a formal written amendment.
- 4. <u>AUDIT</u>: Contractor agrees that the awarding department, the Department of General Services, the Bureau of State Audits, or their designated representative shall have the right to review and to copy any records and supporting documentation pertaining to the performance of this Agreement. Contractor agrees to maintain such records for possible audit for a minimum of three (3) years after final payment, unless a longer; period of records retention is stipulated. Contractor agrees to allow the auditor(s) access to such records during normal business hours and to allow interviews of any employees who might reasonably have information related to such records. Further, Contractor agrees to include a similar right of the State to audit records and interview staff in any subcontract related to performance of this Agreement. (GC 8546.7, PCC 10115 et seq., CCR Title 2, Section 1896).
- 5. <u>INDEMNIFICATION</u>: Contractor agrees to indemnify, defend and save harmless the State, its officers, agents and employees from any and all claims and losses accruing or resulting to any and all contractors, subcontractors, suppliers, laborers, and any other person, firm or corporation furnishing or supplying work services, materials, or supplies in connection with the performance of this Agreement, and from any and all claims and losses accruing or resulting to any person, firm or corporation who may be injured or damaged by Contractor in the performance of this Agreement.
- 6. DISPUTES: Contractor shall continue with the responsibilities under this Agreement during any dispute
- 7. <u>TERMINATION FOR CAUSE</u>: The State may terminate this Agreement and be relieved of any payments should the Contractor fail to perform the requirements of this Agreement at the time and in the manner herein provided. In the event of such termination the State may proceed with the work in any manner deemed proper by the State. All costs to the State shall be deducted from any sum due the Contractor under this Agreement and the balance, if any, shall be paid to the Contractor upon demand.
- 8. <u>INDEPENDENT CONTRACTOR</u>: Contractor, and the agents and employees of Contractor, in the performance of this Agreement, shall act in an independent capacity and not as officers or employees or agents of the State.
- 9. RECYCLING CERTIFICATION: The Contractor shall certify in writing under penalty of perjury, the minimum, if not exact, percentage of recycled content, both post consumer waste and secondary waste as defined in the Public Contract Code, Sections 12161 and 12200, in materials, goods, or supplies offered or products used in the performance of this Agreement, regardless of whether the product meets the required recycled product percentage as defined in the Public Contract Code, Sections 12161 and 12200. Contractor may certify that the product contains zero recycled content. (PCC 10233, 10308.5, 10354)
- 10. <u>NON-DISCRIMINATION CLAUSE</u>: During the performance of this Agreement, Contractor and its subcontractors shall not unlawfully discriminate, harass, or allow harassment against any employee or applicant for employment because of sex, race, color, ancestry, religious creed, national origin, physical

Agreement No.

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disability (including HIV and AIDS), mental disability, medical condition (cancer), age (over 40), marital status, and denial of family care leave. Contractor and subcontractors shall insure that the evaluation and treatment of their employees and applicants for employment are free from such discrimination and harassment, Contractor and subcontractors shall comply with the provisions of the Fair Employment and Housing Act (Government Code Section 12990 (a-f) et seq.) and the applicable regulations promulgated thereunder (California Code of Regulations, Title 2, Section 7285 et seq.). The applicable regulations of the Fair Employment and Housing Commission implementing Government Code Section 12990 (a-f), set forth in Chapter 5 of Division 4 of Title 2 of the California Code of Regulations, are incorporated into this Agreement by reference and made a part hereof as if set forth in full. Contractor and its subcontractors shall give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other Agreement.

Contractor shall include the nondiscrimination and compliance provisions of this clause in all subcontracts to perform work under the Agreement.

- 11. CERTIFICATION CLAUSES: The CONTRACTOR CERTIFICATION CLAUSES contained in the document CCC 304 are hereby incorporated by reference and made a part of this Agreement by this reference as if attached hereto.
- 12. TIMELINESS: Time is of the essence in this Agreement.
- 13. COMPENSATION: The consideration to be paid Contractor, as provided herein, shall be in compensation for all of Contractor's expenses incurred in the performance hereof, including travel; per diem, and taxes, unless otherwise expressly so provided.
- 14. GOVERNING LAW: This contract is governed by and shall be interpreted in accordance with the laws of the State of California.
- 15. ANTITRUST CLAIMS: The Contractor by signing this agreement hereby certifies that if these services or goods are obtained by means of a competitive bid, the Contractor shall comply with the requirements of the Government Codes Sections set out below.
- a. The Government Code Chapter on Antitrust claims contains the following definitions:
- 1). "Public purchase" means a purchase by means of competitive bids of goods, services, or materials by the State or any of its political subdivisions or public agencies on whose behalf the Attorney General may bring an action pursuant to subdivision (c) of Section 16750 of the Business and Professions Code.
- 2). "Public purchasing body" means the State or the subdivision or agency making a public purchase. Government Code Section 4550.
- b. In submitting a bid to a public purchasing body, the bidder offers and agrees that if the bid is accepted, it will assign to the purchasing body all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Sec. 15) or under the Cartwright Act (Chapter 2 (commencing with Section 16700) of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, materials, or services by the bidder for sale to the purchasing body pursuant to the bid. Such assignment shall be made and become effective at the time the purchasing body tenders final payment to the bidder. Government Code Section 4552.
- c. If an awarding body or public purchasing body receives, either through judgment or settlement, a monetary recovery for a cause of action assigned under this chapter, the assignor shall be entitled to receive reimbursement for actual legal costs incurred and may, upon demand, recover from the public body any portion of the recovery, including treble damages, attributable to overcharges that were paid by the assignor but were not paid by the public body as part of the bid price, less the expenses incurred in obtaining that portion of the recovery. Government Code Section 4553.
- d. Upon demand in writing by the assignor, the assignee shall, within one year from such demand, reassign the cause of action assigned under this part if the assignor has been or may have been injured by the

Agreement No. <u>03-671</u> Page 3 of 3

violation of law for which the cause of action arose and (a) the assignee has not been injured thereby, or (b) the assignee declines to file a court action for the cause of action. See Government Code Section 4554.

- 16. <u>CHILD SUPPORT COMPLIANCE ACT</u> For any Agreement in excess of \$100,000, the contractor acknowledges in accordance with, that:
- a). The contractor recognizes the importance of child and family support obligations and shall fully comply with all applicable state and federal laws relating to child and family support enforcement, including, but not limited to, disclosure of information and compliance with earnings assignment orders, as provided in Chapter 8 (commencing with section 5200) of Part 5 of Division 9 of the Family Code; and
- b) The contractor, to the best of its knowledge is fully complying with the earnings assignment orders of all employees and is providing the names of all new employees to the New Hire Registry maintained by the California Employment Development Department."
- 17. <u>UNENFORCEABLE PROVISION</u>: In the event that any provision of this Agreement is unenforceable or held to be unenforceable, then the parties agree that all other provisions of this Agreement have force and effect and shall not be affected thereby.
- 18. <u>UNION ACTIVITIES</u> For all contracts, except fixed price contracts of \$50,000 or less, the Contractor acknowledges that:

By signing this agreement Contractor hereby acknowledges the applicability of Government Code Section 16645 through Section 16649 to this agreement and agrees to the following:

- a) Contractor will not assist, promote or deter union organizing by employees performing work on a state service contract, including a public works contract.
- b) No state funds received under this agreement will be used to assist, promote or deter union organizing
- c) Contractor will not, for any business conducted under this agreement, use any state property to hold meetings with employees or supervisors, if the purpose of such meetings is to assist, promote or deter union organizing, unless the state property is equally available to the general public for holding meetings.
- d) If Contractor incurs costs, or makes expenditures to assist, promote or deter union organizing, Contractor will maintain records sufficient to show that no reimbursement from state funds has been sought for these costs, and that Contractor shall provide those records to the Attorney General upon request.

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Agreement Number 03 - 6 Total

EXHIBIT D (Standard Agreement)

SPECIAL TERMS AND CONDITIONS

Excise Tax

The State of California is exempt from federal excise taxes and no payment will be made for any taxes levied on employees' wages. The State will pay for any applicable State of California or local sales or use taxes on the services rendered or equipment or parts supplied pursuant to this Agreement. California may any applicable sales and use tax imposed by another state.

2. Settlement of Disputes

In the event of a dispute, Contractor shall file a "Notice of Dispute" with the CDFA within ten (10) days of discovery of the problem. Such Notice of Dispute shall contain the Agreement number. Within ten (10) days of receipt of such Notice of Dispute, the Agency Secretary, or Designee, shall meet with the Contractor and the CDFA project manager for the purpose of resolving the dispute. The decision of the Agency Secretary or Designee shall be final. In the event of a dispute, the language contained within this Agreement shall prevail over any other language including that of the bid proposal.

3. Evaluation of Contractor

Performance of the Contractor under this Agreement shall be evaluated. The evaluation shall be prepared on Contract/Contractor Evaluation Sheet (STD 4) and maintained in the Agreement file. For consultant agreements, a copy of the evaluation will be sent to the Department of General Services, Office of Legal Services, if it is negative and the agreement amount is over \$5,000.

4 Agency Liability

The Contractor warrants by execution of this Agreement, that no person or selling agency has been employed or retained to solicit or secure this Agreement upon agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bons fide employees or bons fide established commercial or selling agencies maintained by the Contractor for the purpose of securing business. For breach or violation of this warranty, the State shall, in addition to other remedies provided by law, have the right to annul this Agreement without liability, paying only for the value of the work sctually performed, or otherwise recover the full amount of such commission, percentage, brokerage, or contingent fee.

5 Potential Subcontractors

If Contractor subcontracts out a portion of the work required by this Agreement, nothing contained in this Agreement or otherwise, shall create any contractual relation between the State and any subcontractors, and no subcontract shall relieve the Contractor of his responsibilities and obligations of its subcontractors and of persons either directly or indirectly employed by any of them as it is for the acts and omissions of and of persons either directly or indirectly employed by any of them as it is for the acts and omissions of persons directly employed by the Contractor. The Contractor's obligation to pay its subcontractor is an independent obligation from the State's obligation to make payments to the Contractor. As a result, the State shall have no obligation to pay or to enforce the payment of any moneys to any subcontractor.

6. Right To Terminate

The State reserves the right to terminate this Agreement without cause subject to 30 days written notice to the Contractor. However, this Agreement can be immediately terminated by the State for cause.

Contractor may terminate this Agreement for cause and be relieved of any further obligations subject to a 60-day written notice to the State, only if contractor can no longer perform its responsibilities as provided herein. Upon such termination, the State shall be relieved as any further payments and this Agreement shall be cancelled.